Staff Publications for DOE ARD Review

1. Refereed publications

2011

1. R. Calaga, et. al., **New instability driven by crab-cavity RF phase noise in presence of beam-beam interaction**, to be published in PRST-AB

2. S. Machida, …, D. Trbojevic, **Acceleration in the linear non-scaling fixed field alternating gradient accelerator EMMA, Electron Model for Many Applications**, Nature Physics, December edition (2011)

3. I. Ben-Zvi, X. Chang, V. Litvinenko, W. Meng, A. Pikin, J. Skaritka, **Generating high-frequency, rotating magnetic fields with low harmonic content**, Physical Review and Special Topics - Accelerators and Beams *14*, 092001 (2011), http://prst-ab.aps.org/pdf/PRSTAB/v14/i9/e92001

4. D. Trbojevic, M. Blaskiewicz, E. Forest, **Crossing resonances in non-scaling FFAG**, International Journal of Modern Physics A, Vol. 28, Nos. 10&11 (2011) 1852-1864

5. S.Y. Zhang, D. Trbojevic, **Experimental background for rf upgrade in the relativistic heavy ion collider**, Nuclear Instruments and Methods in Physics Research A 659 (2011) 78-83

6. X. Chang, I. Ben-Zvi, T. Rao, et. al., **Neutralizing trapped electrons on the hydrogenated surface of a diamond-amplifier**, Submitted to Phys. Rev. ST Accel. Beams

7. E. Wang, I. Ben-Zvi, T. Rao, X. Chang, et. al., **Secondary-electron emission from hydrogen-terminated diamond: Experiments and model**, Phys. Rev. ST Accel. Beams, 14, 111301 (2011)

8. E. Wang, I. Ben-Zvi, X. Chang, Q. Wu, T. Rao, J. Smedley, J. Kewisch, T. Xin, **Systematic study of hydrogenation in a diamond amplifier**, Physical Review Special Topics – Accelerators and Beams *14*, 061302 (2011)

9. N. Tsoupas, R. Alforque, A. Jain, W. MacKay, I. Marneris, **Design and measurements of a thin quadrupole magnet for the AGS synchrotron**, NIM A 633 (2011) 1-7

10. B.W.J. McNeil, N.R. Thompson, D.J. Dunning, B. Sheehy, **High harmonic attosecond pulse train amplification in a free electron laser**, Journal of Physics B, 44, 065404 (2011)

11. T. Vecchione, I. Ben-Zvi, D.H. Dowell, J. Feng, T. Rao, J. Smedley, W. Wan, H.A. Padmore, **A low emittance and high efficiency visible light photocathode for high brightness accelerator-based x-ray light sources**, Appl. Phys. Lett. *99*, 034103 (2011)

12. S. Webb, G. Wang, V. Litvinenko, **On Free-Electron Laser growing modes and their bandwidths**, Submitted to Physics Review Letters, May 2011

13. X. Chang, Q. Wu, E. Wang, I. Ben-Zvi, E. Muller, T. Rao, J. Smedley, T. Xin, R. Busby, D. Dimitrov, **New results of electron beam emission from a diamond-amplifier cathode**, Physical Review Special Topics – Accelerators and Beams, April 2011

14. C. Gulliford, I. Bazarov, S. Belomestnykh, V. Shemelin, **Asymmetric Focusing Study from Twin Input Couplers Using Realistic RF Cavity Field Maps,** Phys. Rev. ST Accel. Beams *14*, 032002 (2011), http://prst-ab.aps.org/abstract/PRSTAB/v14/i3/e032002

15. S. Webb, G. Wang, V. Litvinenko, **Three-dimensional model of small signal free-electron lasers**, Physics Review Special Topics – Accelerators and Beams 14, 051003 (2011) http://prst-ab.aps.org/abstract/PRSTAB/v14/i5/e051003

2010

1. …, R. Calaga, …, **CERN Large Hadron Collider optics model, measurements, and corrections**, Phys. Rev. ST Accel. Beams 13, 121004 (2010)

2. H. Hahn, I. Ben-Zvi, R. Calaga, L. Hammons, E.C. Johnson, J. Kewisch, V.N. Litvinenko, W. Xu, **Higher-order-mode absorbers for energy recovery linac cryomodules at Brookhaven National Laboratory**, Phys. Rev. ST Accel. Beams *13*, 121002 (2010)

3. S. Belomestnykh, I. Bazarov, V. Shemelin, J. Sikora, K. Smolenski, V. Veshcherevich, **Deflecting cavity for beam diagnostics at Cornell ERL injector,** Nuclear Instruments and Methods in Physics Research A *614* (2010) 179-183, http://dx.doi.org/10.1016/j.nima.2009.12.063

4. A. Sobol, G. Bell, D. Bruhwiler, A. Fedotov, V. Litvinenko, **Numerical calculation of dynamical friction in electron cooling systems, including magnetic field perturbations and finite time effects**, New Journal of Physics *12* (2010) 093038, http://iopscience.iop.org/1367-2630/12/9/093038/fulltext

5. D.A. Dimitrov, R. Busby, J.R. Cary, I. Ben-Zvi, T. Rao, J. Smedley, X. Chang, J.W. Keister, Q. Wu, E. Muller, **Multiscale three-dimensional simulations of charge gain and transport in diamond**, Journal of Applied Physics *108*, 073712 (2010), http://scitation.aip.org/getpdf/servlet/GetPDFServlet

6. G. Wang, V.N. Litvinenko, S.D. Webb, **Physics of FEL in an infinite electron beam**, Submitted to Physics Review Special Topics – Accelerators and Beams, September 2010

7. X. Chang, Q. Wu, I. Ben-Zvi, A. Burrill, J. Kewisch, T. Rao, J. Smedley, E. Wang, E.M. Muller, R. Busby, D.A. Dimitrov, **Electron beam emission from a diamond-amplified cathodes**, Physical Review Letters *105*, 164801 (2010) http://prl.aps.org/pdf/PRL/v105/i16/e164801

8. E. Wang, J. Kewisch, I. Ben-Zvi, A. Burrill, T. Rao, Q. Wu, D. Holmes, **Heat load of a GaAs photocathode in an SRF electron gun**, Submitted to Chinese Physics C, 7/30/10 http://iopscience.iop.org/1674-1137/35/4/012/pdf/1674-1137_35_4_012.pdf

9. K. Brown, L. Ahrens, I-H. Chiang, C. Gardner, D. Gassner, L. Hammons, M. Harvey, N. Kling, J. Morris, P. Pile, A. Rusek, M. Sivertz, D. Steski, N. Tsoupas, K. Zeno, **The NASA space radiation laboratory at Brookhaven National Laboratory: Preparation and delivery of ion beams for space radiation research**, Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, Vol. 618, Issues 1-3, 1-21, p. 97-107, June 2010

10. D. Naik, I. Ben-Zvi, **Suppressing multipacting in a 56 MHz quarter wave resonator**, Physical Review Special Topics – Accelerators and Beams *13*, 052001 (2010)

11. P. Sprangle, J. Peñano, B. Hafizi, I. Ben-Zvi, **Wall-plug efficiency and beam dynamics in free-electron lasers using energy recovery linacs**, IEEE Journal of Quantum Electronics, Vol. 46, No. 8, August 2010 1135

12. H.K. Avetissian, Kh. V. Sedrakian, **Nonlinear interaction of charged particles with nonplane counterpropagating laser pulses of relativistic intensities**, Phys. Rev. ST AB, 2010 (G. Wang)

13. D. A. Dimitrov, R. Busby, J. R. Cary, I. Ben-Zvi, J. Smedley, X. Chang, T. Rao, J. Keister, E. Muller, A. Burrill, **Simulations of charge gain and collection efficiency from diamond amplifiers, in diamond electronics and bioelectronics — fundamentals to applications III**, edited by P. Bergonzo, J.E. Butler, R.B. Jackman, K.P. Loh, M. Nesladek (Mater. Res. Soc. Symp. Proc. Volume 1203, Warrendale, PA, 2010), 1203-J17-43

14. B.T. Schwartz, D.L. Bruhwiler, V.N. Litvinenko, S. Reiche, G.I. Bell, A. Sobol, G. Wang, Y. Hao, **Massively parallel simulation of anisotropic Debye shielding in the modulator of a coherent electron cooling system and subsequent amplifications in a free electron laser**, Journal of Physics: Conference Series (2010), submitted

15. W. Xu, et. al., **3.5 cell large grain niobium superconducting cavity for a dc superconducting rf photoinjector**, Phys. Rev. ST Accel. Beams 13, 042001 (2010)

16. H. Hahn, **Matrix solution for the wall impedance of infinitely long multilayer circular beam tubes**, Phys. Rev. ST Accel. Beams, *13*, 012002 (2010)

17. H. Hahn, I. Ben-Zvi, R. Calaga, L. Hammons, E.C. Johnson, J. Kewisch, V.N. Litvinenko, W. Xu, **HOM absorbers for ERL cryomodules at BNL**, Phys. Rev. ST Accel. Beams, *13*, 121002 (2010) http://prst-ab.aps.org/pdf/PRSTAB/v13/i12/e121002

18. Y. Hao, V. Ptitsyn, **Effect of electron disruption in the energy recovery linac based electron ion collider**, Physical Review Special Topics – Accelerators and Beams, Vol. 13, Issue 7, 071003, July 2010 http://prst-ab.aps.org/pdf/PRSTAB/v13/i7/e071003

19. W. Xu, I. Ben-Zvi, R. Calaga, H. Hahn, E.C. Johnson, J. Kewisch, **High current cavity design at BNL**, Nuclear Instruments and Methods in Physics Research A *A-662* (2010), p. 17-20

20. V.N. Litvinenko, **Canceling evanescent waves in high-energy SRF linacs**, Physical Review Special Topics – Accelerators and Beams, Vol. 13, Issue 5, 051001 (2010), http://prst-ab.aps.org/abstract/PRSTAB/v13/i5/e051001

2009

1. …, R. Calaga, …, **First beta-beating measurement and optics analysis for the CERN Large Hadron Collider**, published in PRST-AB, PAC09 Special Edition

2. …, R. Calaga, …, **Beam dynamics aspects in the CERN Large Hadron Collider**, Phys. Rev. ST Accel. Beams 12, 101002 (2009)

3. D. Trbojevic, **FFAGs as accelerators and beam delivery devices for ion cancer therapy**, Reviews of Accelerator Science and Technology, World Scientific, Editors, A. Chao, W. Chou, Vol. 2 (2009) 229-251

4. V.N. Litvinenko, Y.S. Derbenev, **Coherent electron cooling**, Physical Review Letters 102, 114801, March 20, 2009

http://link.aps.org/abstract/PRL/v102/e114801

5. E. Pozdeyev, D. Kayran, V. Litvinenko, **Cathode ion bombardment in rf photoguns**, Physical Review Special Topics – Accelerstors and Beams, Vol. 12, Issue 4, 043591 (2009), http://prst-ab.aps.org/abstract/PRSTAB/v12/i4/e043501

6. H. Hahn, E.M. Choi, L. Hammons, **Ferrite-damped higher-order mode study in the Brookhaven energy-recovery linac cavity**, Phys. Rev. ST Accel. Beams *12*, 021002 (2009)

7. J. Smedley, J. Bohon, Q, Wu, T. Rao, **Laser patterning of diamond, Part I. Characterization of surface morphology**, Journal of Applied Physics, Vol. 105, Issue 12, p. 123107 1-5, June 24, 2009
http://jap.aip.org/resource/1/japiau/v105/i12/p123107_s1

8. V.N.Litvinenko, Y.S. Derenev, **Coherent electron cooling**, Physical Review Letters 102, 114801 (2009)
http://link.aps.org/abstract/PRL/v102/e114801

9. V. Ptitsyn, Yu. M. Shatunov, S.R. Mane, **Spin response formalism in circular accelerators**, Nuclear Instruments and Methods in Physics Research A, 608, p. 225-233 (2009)

10. J.G. Neumann, R.B. Fiorito, P.G. O'Shea, H. Loos, B. Sheehy, Y. Shen, Z. Wu, **Terahertz laser modulation of electron beams**, Journal of Applied Physics, 105, 053304 (2009)

11. M. Croft, V. Shukla, N.M. Jisrawi, Z. Shong, R.K. Sadangi, R.L. Holtz, P. Pao, K. Horvath, K. Sadananda, A. Ignatov, J. Skaritka, T. Tsakalakos, **Mapping and load response of overload strain fields: synchrotron x-ray measurements**, International Journal of Fatigue, 31, 11-12, 1669-1677 (2009)

2008

1. G. Wang, M. Blaskiewicz, **The dynamics of ion shielding in an anisotropic electron plasma**, Physical Review E 78, 026413 (2008)

2. …, R. Calaga, …, **The anamolous scaling law of the electron cloud instability with the beam energy**, submitted to Phys. Rev. Lett. (2008)

3. G. I. Bell, D. L. Bruhwiler, A. Fedotov, A. Sobol, R.S. Busby, P. Stoltz, D.T. Abell, P. Messmer, I. Ben-Zvi, V. Litvinenko, **Simulating the dynamical friction force on ions due to a briefly co-propagating electron beam**, Journal of Computational Physics *227* (2008) 8714-8735
http://www.sciencedirect.com/science/article/pii/S0021999108003410

4. V.N. Litvinenko, **Physics of super pulses in storage ring Free-Electron Lasers**, Research Letters in Physics, Vol. 2008, Article ID 592869, 5, http://www.hindawi.com/journals/rlp/volume-2008/regular.1.html

5. V. Litvinenko, I. Ben-Zvi, D. Kayran, I. Pogorelsky, E. Pozdeyev, T. Roser, V. Yakimenko, **Potential uses of ERL-based gamma-ray sources**, IEEE Trans. on Plasma Science, Volume: *36* Issue: 4 Part: 4 (2008), 1799-1807 http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4599040

6. S. Belomestnykh, V. Shemelin, **Multipacting-free transitions between cavities and beam-pipes,** *Nuclear Instruments and Methods in Physics Research A* **595** (2008) 293-298, http://dx.doi.org/10.1016/j.nima.2008.05.041

7. T. Tsang, S. Bellavia, R. Connolly, D. Gassner, Y. Makdisi, T. Russo, P. Thieberger, D. Trbojevic, A. Zelenski, **Optical beam profile monitor and residual gas fluorescence at the RHIC polarized hydrogen jet**, Accepted for publication in Review of Scientifc Instruments (2008)

8. W. Xu, et. al., **Measurement and adjustment of dumb-bells for 9-cell TESLA cavity** (in Chinese), Chinese Physics C, Vol. 32, S1: p. 154, March 2008

9. W. Xu, et. al., **Lorentz detuning and tuning system study for PKU-FEL injector** (in Chinese), Chinese Physics C, Vol. 32, No. 3, p. 215, March 2008

10. I. Bazarov, D. Ouzounov, B. Dunham, Y. Li, R. Meller, J. Sikora, and C. Sinclair, **Efficient temporal shaping of electron distributions for high-brightness photoemission electron guns**, *Phys. Rev. ST Accel. Beams* **11**, 040702 (2008), http://prst-ab.aps.org/abstract/PRSTAB/v11/i4/e040702

11. P. Thieberger, L. Ahrens, J. Alessi, J. Benjamin, M. Blaskiewicz, J.M. Brennan, K. Brown, C. Carlson, C. Gardner, W. Fischer, D. Gassner, J. Glenn, W. MacKay, G. Marr, T. Roser, K. Smith, L. Snydstrup, D. Steski, D. Trbojevic, N. Tsoupas, V. Zajic, K. Zeno, **Improved gold ion stripping at 0.1 and 10 GeV=nucleon for the Relativistic Heavy Ion Collider**, Phys. Rev. ST Accel. and Beams, 11, 011001 (2008)

12. W. Fischer, M. Blaskiewicz, J.M. Brennan, H. Huang, H.C. Hseuh, V. Ptitsyn, T. Roser, P. Thieberger, D. Trbojevic, U. Iriso, J. Wei, S.Y. Zhang, **Electron cloud observations and cures in the Relativistic Heavy Ion Collider**, Phys. Rev. ST Accel. Beams 11, 041002 (2008) http://prst-ab.aps.org/abstract/PRSTAB/v11/i4/e041002

13. G. DeNinno, E. Allaria, M. Coreno, S. Chowdhury, F. Curbis, M.B. Danailov, B. Diviacco, M. Ferianis, E. Karantzoulis, E.C. Longhi, I.V. Pinayev, C. Spezzani, M. Trovo, V.N. Litvinenko, **Self-induced harmonic generation in a storage-ring free-electron laser**, Phys. Rev. Lett. 100 104801 (2008) http://link.aps.org/abstract/PRL/v100/e104801.html

14. S.Y. Zhang, V. Ptitsyn, **Proton beam emittance growth in the Relativistic Heavy Ion Collider**, Phys. Rev. ST: Accel. Beams 11, 051001 May 2008 http://prst-ab.aps.org/abstract/PRSTAB/v11/i5/e051001

15. B. Sheehy, J.A. Clarke, N.R. Thompson, B.W.J. McNeil, A. Gordon, **Noise and coherence properties of HHG for FEL seeding**, Proceedings of FEL Frontiers 07, Elba, Italy, 2007, Published in Nuclear Instruments and Methods A, 593, 21 (2008)

16. M. Croft, N. Jisrawi, Z. Zhong, R. Holtz, M. Shephard, M. Lakshmipathy, K. Sadananda, J. Skaritka, V. Sukla, R. Sadangi, T. Tsakalakos, **Stress gradient induced strain localization in metals: high resolution strain cross sectioning via synchrotron x-ray diffraction**, Engineering Materials and Technology, 130, 021005 (2008)

2007

1. D. Trbojevic, B. Parker, E. Keil, A.M. Sessler, **Carbon/proton therapy: A novel gantry design**, Phys. Rev. ST – Accelerators and Beams 10, 053503 (2007)

2. E. Keil, A.M. Sessler, D. Trbojevic, **Hadron cancer therapy complex using nonscaling fixed field alternating gradient accelerator and gantry design**, Physical Review Special Topics – Accelerator and Beams 10, 054701 (2007)

3. T. Kumita, Y. Kamiya, M. Babzien, I. Ben-Zvi, K. Kusche, I.V. Pavlishin, I.V. Pogorelsky, D.P. Siddons, V. Yakimenko, T. Omori, J. Urakawa, K. Yokoya, T. Hirose, D. Cline, F. Zhou, **Observation of nonlinear Thomson scattering at BNL-ATF**, International Journal of Modern Physics B (IJMPB) Volume: **21** No: 3/4 Year: 2007 p. 473-480

4. G. Andonian, M. Dunning, E. Hemsing, J.B. Rosenzweig, A. Cook, A. Murokh, S. Reiche, M. Babzien, I. Ben-Zvi, K. Kusche, V. Yakimenko, D. Alesini, L. Palumbo, C. Vicario, **Observation of coherent edge radiation emitted by a 100 femtosecond compressed electron beam**, International Journal of Modern Physics A (IJMPA) Volume: 22 No: 23 Year: 2007 p. 4101-4114

5. I. Ben-Zvi, T. Rao, A. Burrill, X. Chang, J. Grimes, J. Rank, Z. Segalov, J. Smedley, **Diamond secondary emitter**, International Journal of Modern Physics A (IJMPA) Volume: 22 No: 22 Year: 2007 p. 3759-3775

6. V.N. Litvinenko, Y.S. Derbenev, **Free electron lasers and high-energy electron cooling**, 29th International Free-Electron Laser Conference, Budker, INP, Novosibirsk, Russia, August 26-31, 2007, p. 268-275 http://accelconf.web.cern.ch/accelconf/p07/PAPERS/TUCAU01.pdf

7. W. Xu, et. al., **A compact high-average current photo-injector**, High Energy Physics and Nuclear Physics, Vol. 31, No. 5, p. 496-500, May 2007

8. H. Huang, L. Ahrens, M. Bai, K. Brown, E.D. Courant, C. Gardner, J.W. Glenn, F. Lin, A.U. Luccio, W.W. MacKay, M. Okamura, V. Ptitsyn, T. Roser, J. Takano, S. Tepikian, N. Tsoupas, A. Zelenski, K. Zeno, **Overcoming depolarizing resonances with dual helical partial Siberian snakes**, Physical Review Letters *99*, 154801 (2007)
http://prl.aps.org/abstract/PRL/v99/i15/e154801

9. F. Lin, L. Ahrens, M. Bai, K. Brown, E.D. Courant, C. Gardner, J.W. Glenn, H. Huang, S.Y. Lee, A.U. Luccio, W.W. MacKay, V. Ptitsyn, T. Roser, J. Takano, S. Tepikian, N. Tsoupas, A. Zelenski, K. Zeno, **Exploration of horizontal intrinsic spin resonances with two partial Siberian snakes**, Phys. Rev. ST – Accel. and Beams, 10, 044001 (2007)
http://prst-ab.aps.org/abstract/PRSTAB/v10/i4/e044001

10. N. Tsoupas, L. Ahrens, S. Bellavia, R. Bonati, K.A. Brown, I-H. Chiang, C.J. Gardner, D. Gassner, S. Jao, W.W. MacKay, I. Marneris, W. Meng, D. Phillips, P. Pile, R. Prigl, A. Rusek, L. Snydstrup, K. Zeno, **Uniform beam distributions at the target of the NASA space radiation laboratory's beam line**, Phys. Rev. ST – Accel. and Beams, 10, 024701 (2007)

11. M. Croft, N. Jisrawi, Z. Zhong, R. Holtz, K. Sadananda, J. Skaritka, T. Tsakalakos, **Fatigue history and in-situ loading studies of the overload effect using high resolution x-ray strain profiling**, International Journal of Fatigue, 29, 9-11, 1726-1736 (2007)

12. W. Xu, et. al., **Experiment study of improved TESLA style HOM coupler test** (in Chinese), High Energy Physics and Nuclear Physics, Vol. 31, No. 3, p. 300, March 2007

13. B.W.J. McNeil, J.A. Clarke, D.J. Dunning, G.J. Hirst, H.L. Owen, N.R. Thompson, B. Sheehy, P.H. Williams, **An XUV-FEL amplifier seeded using high harmonic generation**, New J. Phys. 9, 82 (2007)

14.

2. Non-refereed publications

2011

1. A. Anastassopoulos, D. Babusci, M. Bai, S. Baessler, M. Berz, M. Blaskiewicz, K. Brown, P. Cameron, G. Daskalakis, N. D'Imperio, M.E. Emirhan, F. Esser, G. Fanourakis, A. Fedotov, A. Ferrai, W. Fischer, T. Geralis, Y. Giomataris, F. Gonnella, M. Gross Perdekamp, R. Gupta, G. Guidoboni, S. Haciomeroglu, Y. Haritantis, G. Hoffstaetter, H. Huang, M. Incagli, D. Kawall, B. Khazin, I.B. Khriplovich, I.A. Koop T. Laopoulos, R. Larsen, D.M. Lazarus, A. Lehrach, P. Lenisa, P. Levi Sandri, F. Lin, A.U. Luccio, A. Lyapin, W.W. MacKay, R. Maier, K. Makino, N. Malitsky, W. Marciano, S. Martin, W. Meng, F. Meot, R. Messi, D. Moricciani, W.M. Morse, S.K. Nayak, Y.F. Orlov, C.S. Ozben, A. Pesce, V. Ptitsyn, B. Parker, P. Pile, V. Polychronakos, B. Podobedov, D. Raparia, F. Rathmann, S. Redin, S. Rescia, G. Ruoso, T. Russo, N. Saito, J. Seele, Y.K. Semertzidis (spokesperson), Yu. Shatunov, V. Shemelin, A. Sidorin, A. Silenko, N. Simos, S. Siskos, A. Stahl, E.J. Stephenson, H. Stroeher, J. Talman, R.M. Talman, P. Thieberger, N. Tsoupas, Y. Valdau, G. Venazoni, K. Vetter, S. Vlassis, G. Zavattini, A. Zelenski, K. Zioutas, **A proposal to measure the proton electric dipole moment with 10-29e-cm sensitivity by the storage ring EDM collaboration**, Final Report, October 31, 2011

2. V.V. Smalyuk, E.A. Bekhtenev, V.P. Cherepanov, G.V. Karpov, V. Kuzminykh, O.I. Meshkov, I. Pinayev, O. Singh, K. Vetter, **Beam diagnostics for the NSLS-II Booster**, Proceedings of DIPAC 2011, Hamburg, Germany

3. J. Kewisch, X.Y. Chang, I. Ben-Zvi, V. Litvinenko, T. Rao, J. Skaritka, B. Sheehy, A. Pikin, W. Meng, E. Wang, Q. Wu, D. Pate, A. Burrill, T. Xin, D. Holmes, **Polarized electron gun development at the Brookhaven National Laboratory**, Journal of Physics: Conference Series v298, 012004 (2011)

4. A. Fedotov, D. Kayran, **Wake fields and energy spread for eRHIC erl**, Proc. of ERL 2011, Tsukuba, Japan, October 16-21, 2011

5. C. Montag, T. Satogata, L.A. Ahrens, M. Bai, J. Beebe-Wang, I. Blackler, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, J.J. Butler, C. Carlson, R. Connolly, T. D'Ottavio, K.A. Drees, W. Fischer, W. Fu, D.M. Gassner, M. Harvey, T. Hayes, H. Huang, R.L. Hulsart, P.F. Ingrassia, A. Jain, N.A. Kling, M. Lafky, J.S. Laster, R.C. Lee, Y. Luo, W.W. MacKay, M. Mapes, G.J. Marr, A. Marusic, K. Mernick, R.J. Michnoff, M.G. Minty, J. Morris, C. Naylor, S. Nemesure, F.C. Pilat, V. Ptitsyn, G. Robert-Demolaize, T. Roser, P. Sampson, V. Schoefer, C. Schultheiss, F. Severino, T.C. Shrey, K.S. Smith, S. Tepikian, P. Thieberger, D. Trbojevic, N. Tsoupas, J.E. Tuozzolo, M. Wilinski, A. Zaltsman, K. Zeno, S.Y. Zhang, **Experience with low-energy gold-gold operations in RHIC during FY 2010**, Internal Technical Note C-A/AP/435, October 2011

6. P. Jain, I. Ben-Zvi, C. Schultheiss, **Temperature dependent microphonics in the BNL electron cooler**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011

7. G. Marr, L. Ahrens, M. Bai, J. Beebe-Wang, I. Blackler, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, J. Butler, C. Carlson, R. Connolly, T. D'Ottavio, K.A. Drees, A. Fedotov, W. Fischer, W. Fu, C.J. Gardner, D.M. Gassner, J.W. Glenn, X. Gu, M. Harvey, T. Hayes, L. Hoff, H. Huang, P. Ingrassia, J. Jamilkowski, N. Kling, M. Lafky, J. Laster, C. Liu, Y. Luo, M. Mapes, A. Marusic, K. Mernick, R. Michnoff, M. Minty, C. Montag, J. Morris, C. Naylor, S. Nemesure, S. Polizzo, V. Ptitsyn, G. Robert-Demolaize, T. Roser, P. Sampson, J. Sandberg, V. Schoefer, C. Schultheiss, F. Severino, T. Shrey, K. Smith, D. Steski, S. Tepikian, P. Thieberger, D. Trbojevic, N. Tsoupas, J. Tuozzolo, B. VanKuik, G. Wang, M. Wilinski, A. Zaltsman, K. Zeno, S.Y. Zhang, **RHIC performance for FY2011 Au+Au heavy ion run**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011
http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/tupz038.pdf

8. V. Yakimenko, M. Fedurin, V.N. Litvinenko, A.V. Fedotov, D. Kayran, P. Muggli, **Experimental demonstration of suppression of coherent synchrotron radiation wake-field**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011

9. D. Trbojevic, J. Beebe-Wang, Y. Hao, D. Kayran, V.N. Litvinenko, V. Ptitsyn, N. Tsoupas, **eRHIC interaction region design**, Proc. 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, p. 3729
http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/thpz020.pdf

10. D. Trbojevic, **Innovative superconducting non scaling fixed field alternating gradient isocentric gantry for carbon cancer therapy**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, p. 2544
http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/weps029.pdf

11. D. Trbojevic, J. Beebe-Wang, Y. Hao, V.N. Litvinenko, V. Ptitsyn, D. Kayran, N. Tsoupas, **Recirculating electron linacs (REL) for LHeC and eRHIC**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, p. 1099
http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/tupc045.pdf

12. D. Trbojevic, **Lattice design of a rapid cycling medical synchrotron for carbon/proton therapy**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, p. 2541
http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/weps028.pdf

13. M. Minty, W. Fischer, H. Huang, R. Hulsart, C. Liu, Y. Luo, G. Marr, A. Marusic, K. Mernick, R. Michnoff, V. Ptitsyn, G. Robert-Demolaize, T. Roser, V. Schoefer,

S. Tepikian, M. Wilinski, Precision beam instrumentation and feedback-based beam control at RHIC, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011 http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/mopo22.pdf

14. V. Litvinenko, S.A. Belomestnykh, I. Ben-Zvi, J. Bengtsson, A.V. Fedotov, Y. Hao, D. Kayran, G.J. Mahler, W. Meng, T. Rao, T. Roser, B. Sheehy, R. Than, J.E. Tuozzolo, G. Wang, V. Yakimenko, G.I. Bell, D.L. Bruhwiler, V.H. Ranjbar, B.T. Schwartz, A. Hutton, G.A. Krafft, M. Poelker, R.A. Rimmer, M.A. Kholopov, P. Vobly, **Coherent electron cooling demonstration experiment**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, p. 3442 http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/thps009.pdf

15. V. Ptitsyn, E.C. Aschenauer, J. Beebe-Wang, S.A. Belomestnykh, I. Ben-Zvi, R. Calaga, X. Chang, A.V. Fedotov, H. Hahn, L.R. Hammons, Y. Hao, P. He, A.K. Jain, E.C. Johnson, D. Kayran, J. Kewisch, V. Litvinenko, G.J. Mahler, W. Meng, B. Parker, A.I. Pikin, T. Rao, T. Roser, B. Sheehy, J. Skaritka, R. Than, D. Trbojevic, N. Tsoupas, J.E. Tuozzolo, G. Wang, Q. Wu, W. Xu, **High luminosity electron-hadron collider eRHIC**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/thpz019.pdf

16. D.A. Dimitrov, R. Busby, J.R. Cary, D.N. Smithe, I. Ben-Zvi, X. Chang, T. Rao, J. Smedley, Q. Wu, E. Wang, **Simulations of surface effects and electron emission from diamond-amplifier cathodes**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/wepc132.pdf

17. J. Smedley, K. Mueller, T. Rao, K. Attenkofer, S.W. Lee, I. Ben-Zvi, X. Liang, E.M. Muller, M. Ruiz-Oses, H.A. Padmore, T. Vecchione, **High efficiency visible photocathode development**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011

18. D. Trbojevic, **Non-scaling fixed field alternating gradient permanent magnet cancer therapy accelerator**, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011 http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/weoba03.pdf

19. H. Huang, L. Ahrens, I.G. Alekseev, E. Aschenauer,G. Atoian, M. Bai, A. Bazileysky, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, R. Connolly, A. Dion, T. D'Ottavio, K.A. Drees, W. Fischer, C.J. Gardner, J.W. Glenn, X. Gu, M. Harvey, T. Hayes, L. Hoff, R. Hulsart, J. Laster, L. Liu, Y. Luo, W. MacKay, Y. Makdisi, G. Marr, A. Marusic, F. Meot, K. Mernick, R. Michnoff, M. Minty, C. Montag, J. Morris, S. Nemesure, A. Poblaguev, V. Ptitsyn, V. Ranjbar, G. Robert-Demolaize, T. Roser, B. Schmidke, V. Schoefer, F. Severino, D. Smirnov, K. Smith, D. Steski, D. Svrida, S. Tepikian, D. Trbojevic, N. Tsoupas, J. Tuozzolo, G. Wang, M. Wilisnki, K. Yip, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang,

RHIC polarized proton status and operation highlights, 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011, http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/tupz035.pdf

20. E.C. Johnson, I. Ben-Zvi, H. Hahn, L. Hammons, W. Xu, **Higher order mode analysis at the BNL energy recovery linac**, Internal Technical Note C-A/AP/429, August 2011

21. V.N. Litvinenko, S. Belomestnykh, I. Ben-Zvi, J.C. Brutus, A. Fedotov, Y. Hao, D. Kayran, G. Mahler, A. Marusic, W. Meng, G. McIntyre, M. Minty, V. Ptitsyn, I. Pinayev, T. Rao, T. Roser, B. Sheehy, S. Tepikian, Y. Than, D. Trbojevic, J. Tuozzolo, G. Wang, V. Yakimenko, M. Poelker, A. Hutton, G. Kraft, R. Rimmer, D.L. Bruhwiler, D.T. Abell, C. Nieter, V. Ranjbar, B.T. Schwartz, P. Vobly, M. Kholopov, O. Shevchenko, P. Mcintosh, A. Wheelhouse, **Proof-of-principle experiment for FEL-based coherent electron cooling,** 33rd International Free Electron Laser Conference (FEL 2011), Shanghai, China, August 22-26, 2011

22. V. Litvinenko, I. Ben-Zvi, L. Hammons, Y. Hao, S. Webb, J. Beebe-Wang, S. Belomestnykh, M. Blaskiewicz, R. Calaga, X. Chang, A. Fedotov, D. Gassner, P. He, W. Jackson, E. Johnson, D. Kayran, J. Kewisch, Y. Luo, G. Mahler, W. Meng, M. Minty, B. Parker, A. Pikin, V. Ptitsyn, T. Rao, T. Roser, J. Skaritka, B. Sheehy, S. Tepikian, Y. Than, D. Trbojevic, N. Tsoupas, J. Tuozzolo, G. Wang, Q. Wu, W. Xu, A. Zelenski, et. al., **High-energy high-luminosity electron-ion collider eRHIC**, *Proceedings of the DPF-2011 Conference*, Providence, RI, August 8-13, 2011

23. …, V.N. Litvinenko, …, V. Ptitsyn, …, D. Trbojevic, N. Tsoupas, …, **A large hadron electron collider at CERN, Machine Detector**, CERN-LHeC-Note-2011-003, August 2011

24. T. Xin, I. Ben-Zvi, S. Belomestnykh, X. Chang, T. Rao, J. Skaritka, Q. Wu, E. Wang, X. Liang, **Design of the fundamental power coupler and photocathode Inserts for the 112 MHz superconducting electron gun**, *Proceedings of the 15th International Conference on RF Superconductivity*, Chicago, IL, July 25-29, 2011

25. W. Xu, Z. Altinbas, I. Ben-Zvi, S. Belomestnykh, A. Burrill, M. Cole,S. Deonarine, J. Jamilkowski, D. Gassner, D. Kayran, P. Kankiya, N. Laloudakis, G. McIntyre, L. Masi Jr, D. Pate, D. Philips, T. Seda, A. Steszyn, T. Tallerico, R. Todd, D. Weiss, G. Whitbeck, A. Zaltsman, **Conditioning the fundamental power coupler for ERL SRF gun**, *Proceedings of the 15th International Conference on RF Superconductivity*, Chicago, IL, July 25-29, 2011

26. A. Neumann, W. Anders, R. Goergen, J. Knobloch, O. Kugeler, S. Belomestnykh, J. Dobbins, R. Kaplan, M. Liepe, C. Strohman, **CW measurements of Cornell LLRF system at HoBiCaT**, *Proceedings of the 15th International Conference on RF Superconductivity*, Chicago, IL, July 25-29, 2011

27. P. McIntosh, R. Bate, P. Goudket, J.F. Orrett, S. Pattalwar, S. Belomestnykh, M. Liepe, H. Padamsee, P. Quigley, J. Sears, V. Shemelin, V. Veshcherevich, D. Proch, J. Sekutowicz, A. Buechner, F. Gabriel, P. Michel, J. Corlett, D. Li, S. M. Lidia, M. Cordwell, T. J. Jones, J. Strachan, T. Kimura, T. I. Smith, R. Laxdal, **Assembly of the international ERL cryomodule at Daresbury Laboratory,** *Proceedings of the 15th International Conference on RF Superconductivity*, Chicago, IL, July 25-29, 2011

28. Q. Wu, et al., **Novel deflecting cavity design for eRHIC**, *Proceedings of the 15th International Conference on RF Superconductivity*, Chicago, IL, July 25-29, 2011

29. V. Ptitsyn, **Accelerator design of high luminosity electron-hadron collider eRHIC**, submitted to Proc. of 19th Particles and Nuclei International Conference (PANIC11), Cambridge, MA, July 24-29, 2011

30. G. Wang, V. Litvinenko, S. Webb, **Asymptotic behavior of 1D FEL dispersion integral at large Isl**, BNL Internal Technical Note C-A/AP/428, July 2011 http://www.cadops.bnl.gov/AP/ap_notes/ap_note_428.pdf

31. D. Trbojevic, **Acceleration in non-scaling FFAG**, 2nd Workshop on Hadron Beam Therapy of Cancer, Erice, Sicily, Italy, May 20-27, 2011

32. H. Hahn, W. Xu, **HOM absorbers for ERL cryomodules at BNL**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

33. E. Wang, J. Kewisch, I. Ben-Zvi, A. Burrill, T. Rao, Q. Wu, **Polarized SRF electron gun test**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011 http://www.c-ad.bnl.gov/pac2011/proceedings/html/sessi0n/htm

34. E. Wang, I. Ben-Zvi, A. Burrill, J. Kewisch, X. Chang, T. Rao, J. Smedley, Q. Wu, E. Muller, T. Xin, **Progress on diamond amplified photo-cathode**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, http://www.c-ad.bnl.gov/pac2011/proceedings/html/sessi0n.htm

35. J.H. Park, H. Bluem, M.D. Cole, D. Holmes, T. Schultheiss, A.M.M. Todd, I. Ben-Zvi, J. Kewisch, E. Wang, **Status of the polarized SRF photocathode gun design**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

36. A. Sobol, D. Bruhwiler, G. Bell, A. Fedotov, V. Litvinenko, **Numerical calculation of dynamical friction in electron cooling systems, including magnetic field perturbations**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, presentation only

37. V. Yakimenko, M. Fedurin, V.N. Litvinenko, A.V. Fedotov, D. Kayran, P. Muggli, **CSR shielding experiment**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 1977-1979 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/wep107.pdf

38. V.S. Morosov, S.A. Bogacz, Y.R. Ronlin, K.B. Beard, D. Trbojevic, **Matched optics of muon RLA and non-scaling FFAG arcs**, 2011 Particle Accelerator Confeence (PAC'11), New York, NY, March 28-April 1, 2011 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/mop052.pdf

39. L. Prost, A. Shemyakin, A. Fedotov, J. Kewisch, **Low-energy run of Fermilab electron cooler's beam generation system**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

40. L.R. Hammons, H. Hahn, **HOM damping properties of fundamental power couplers in superconducting electron gun of the energy recovery Linac at Brookhaven National Laboratory**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

41. L.R. Hammons, H. Hahn, **Ferrite HOM load surrounding a ceramic break**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

42. H. Hahn, **Radial transmission line analysis of multi-layer circular structures**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

43. S.A. Belomestnykh, I. Ben-Zvi, X. Chang, R. Than, C.H. Boulware, T.L. Grimm, B. Siegel, M.J. Winowski, **Design and first cold test of BNL superconducting 112 MHz QWR for electron gun applications**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

44. V. Ptitsyn, E. Aschenauer, M. Bai, J. Beebe-Wang, S. Belomestnykh, I. Ben-Zvi, M. Blaskiewicz, R. Calaga, X. Chang, A. Fedotov, D. Gassner, L. Hammons, H. Hahn, Y. Hao, P. He, W. Jackson, A. Jain, E.C. Johnson, D. Kayran, J. Kewisch, V.N. Litvinenko, Y. Luo, G. Mahler, G. McIntyre, W. Meng, M. Minty, B. Parker, A. Pikin, T. Rao, T. Roser, J. Skaritka, B. Sheehy, S. Tepikian, Y. Than, D. Trbojevic, N. Tsoupas, J. Tuozzolo, G. Wang, S. Webb, Q. Wu, W. Xu, **High luminosity electron-hadron collider eRHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 693-695 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tuoan2.pdf

45. C. Pai, I. Ben-Zvi, A. Burrill, X. Chang, G.T. McIntyre, R. Than, J.E. Tuozzolo, Q. Wu, **Mechanical design of 56 MHz superconducting RF cavity for RHIC collider**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup054.pdf

46. B. Sheehy, Z. Altinbas, I. Ben-Zvi, D.M. Gassner, H. Hahn, L.R. Hammons, J.P. Jamilkowski, D. Kayran, J. Kewisch, N. Laloudakis, D.L. Lederle, V. Litvinenko, G.T. McIntyre, D. Pate, D. Phillips, C. Schultheiss, T. Seda, R. Than, W. Xu, A. Zaltsman, A. Burrill, T. Schultheiss, **BNL 703 MHz superconducting RF cavity testing**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 913-915 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup056.pdf

47. Q. Wu, S. Bellavia, I. Ben-Zvi, C. Pai, **The fundamental power coupler and pick-up of the 56MHz cavity for RHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup057.pdf

48. Q. Wu, S. Bellavia, I. Ben-Zvi, M.C. Grau, G. Miglionico, C. Pai, **Fundamental damper power calculation of the 56MHz SRF cavity for RHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup058.pdf

49. W. Xu, **Study on 3+1/2 cell dc-sc photo-injector**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 201

50. W. Xu, I. Ben-Zvi, R. Calaga, H. Hahn, E. Johnson, J. Kewisch, **High current superconducting cavity design for eRHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

51. W. Xu, S.A. Belomestnykh, I. Ben-Zvi, A. Burrill, D. Kayran, B. Sheehy, D. Holmes, **Multipacting in a grooved choke joint at SRF gun for BNL ERL prototype**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011 (TUP059) http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup059.pdf

52. W. Xu, S.A. Belomestnykh, I. Ben-Zvi, H. Hahn, E.C. Johnson, **New HOM coupler design for high current SRF cavity**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

53. W. Xu, Z. Altinbas, I. Ben-Zvi, A. Burrill, J.P. Jamilkowski, D. Kayran, G.T. McIntyre, D. Pate, D. Phillips, T. Seda, T.N. Tallerico, D. Weiss, A. Zaltsman, M.D. Cole, **FPC conditioning cart at BNL**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

54. X. Chang, I. Ben-Zvi, J. Kewisch, V. Litvinenko, W. Meng, A.I. Pikin, V. Ptitsyn, T. Rao, B. Sheehy, J. Skaritka, Q. Wu, E. Wang, T. Xin, **Rotating dipole and quadrupole field for a multiple cathode system**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 1106-1108 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup147.pdf

55. R.C. Gupta, M. Anerella, I. Ben-Zvi, G. Ganetis, D. Kayran, G.T. McIntyre, J.F. Muratore, S.R. Plate, W. Sampson, M.D. Cole, D. Holmes, **Design construction**

and test results of a HTS solenoid for energy recovery linac, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

56. R. Than, I. Ben-Zvi, A. Burrill, M.C. Grau, D.L. Lederle, C.J. Liaw, G.T. McIntyre, D. Pate, R. Porqueddu, T.N. Tallerico, J.E. Tuozzolo, **Cryogenic vertical test facility for the SRF cavities at BNL**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

57. T. Schultheiss, C.M. Astefanous, M.D. Cole, D. Holmes, J. Rathke, I. Ben-Zvi, D. Kayran, G.T. McIntyre, B. Sheehy, R. Than, A. Burrill, **Analysis and comparison to test of AlMg3 seals near a SRF cavity**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

58. D.A. Dimitrov, R. Busby, J.R. Cary, D.N. Smithe, I. Ben-Zvi, X. Chang, T. Rao, J. Smedley, E. Wang, Q. Wu, **Modeling and simulations of electron emission from diamond-amplified cathodes**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/wep161.pdf

59. D.A. Dimitrov, R. Busby, I. Ben-Zvi, J.W. Keister, T. Rao, J. Smedley, E.M. Muller, **Modeling of diamond based devices for beam diagnostics**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

60. X. Chang, I. Ben-Zvi, J. Kewisch, V. Litvinenko, A.I. Pikin, V. Ptitsyn, T. Rao, B. Sheehy, J. Skaritka, Q. Wu, E. Wang, T. Xin, **A multiple cathode gun design for the eRHIC polarized electron source**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 1969-1971
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/wep263.pdf

61. H. Huang, L.A. Ahrens, E.C. Aschenauer, G. Atoian, M. Bai, A. Bazilevsky, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, R. Connolly, T. D'Ottavio, A. Dion, K.A. Drees, W. Fischer, C.J. Gardner, J.W. Glenn, X. Gu, M. Harvey, T. Hayes, L.T. Hoff, R.L. Hulsart, J.S. Laster, C. Liu, Y. Luo, W.W. MacKay, J. Morris, S. Nemesure, A. Poblaguev, V. Ptitsyn, V.H. Ranjbar, G. Robert-Demolaize, T. Roser, W.B. Schmidke, V. Schoefer, F. Severino, D. Smirnov, K.S. Smith, D. Steski, S. Tepikian, D. Trbojevic, N. Tsoupas, J.E. Tuozzolo, G. Wang, M. Wilinski, K. Yip, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, I.G. Alekseev, D. Svirida, **RHIC polarized proton operation**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28-April 1, 2011
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/moocn3.pdf

62. K. Vetter, J.H. DeLong, A.J. DellaPenna, K.M. Ha, Y. Hu, B.N.Kosciuk, J. Mead, I. Pinayev, O. Singh, Y. Tian, G.J. Portmann, J.J. Sebek, **NSLS-II rf beam position monitor**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

63. S. M. Gurov, et. al., **Status of the NSLS-II booster**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

64. R.P. Fillier, R. Heese, B.N. Kosciuk, D. Padrazo, I. Pinayev, J. Rose, T.V. Shaftan, O. Singh, **Performance of the diagnostics for the NSLS-II Linac commissioning**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

65. T.V. Shaftan, R. Alforque, A. Blednykh, W.R. Casey, L.R. Dalesio, F. Faussete, M.J. Ferreira, R.P. Fillier, G. Ganetis, R. Heese, H-C. Hseuh, P.K. Job, B.N. Kosciuk, S. Kowalski, S.L. Kramer, B. Parker, I. Pinayev, S.K. Sharma, O. Singh, C.J. Spataro, G.M. Wang, F.J. Willeke, **Progress with NSLS-II injection straight section design**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

66. I. Pinayev, **Compensation of fast kicker rolls with skew quadrupoles**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

67. I. Pinayev, A. Blednykh, M.J. Ferreria, R.P. Fliller, B.N. Kosciuk, T.V. Shaftan, G.M. Wang, **NSLS-II injection straight diagnostics**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

68. J.E. Tuozzolo, G. Wang, S.D. Webb, V. Yakimenko, G.I. Bell, D.L. Bruhwiler, B.T. Schwartz, A. Hutton, G.A. Krafft, M. Poelker, R.A. Rimmer, **Proof-of-principle experiment for FEL-based coherent electron cooling**, Proceedings of 2011 Particle Accelerator Conference, New York, NY, March 25-April 1, 2011, p. 2064-2066 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thobn3.pdf

69. G. Wang, V. Litvinenko, S.D. Webb, **Amplification of current density modulation in a FEL with an infinite electron beam**, Proceedings of 2011 Particle Accelerator Conference, New York, NY, March 25-April 1, 2011, p. 2399-2401, http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thp149.pdf

70. P. Thieberger, L. Arnold, C. Folz, R. Hulsart, A. Jain, R. Karl, G. Mahler, W. Meng, K. Mernick, R. Michnoff, M. Minty, C. Montag, V. Ptitsyn, J. Tuozzolo, J. Ritter, L. Smart, J. White, **The dipole corrector magnets for the RHIC fact global orbit feedback system**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thp064.pdf

71. K.A. Drees, L.A. Ahrens, M. Bai, J. Beebe-Wang, I. Blackler, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, J. Butler, C. Carlson, R. Connolly, T. D'Ottavio, W. Fischer, W. Fu, D. Gassner, M. Harvey, T. Hayes, H. Huang, R. Hulsart, P. Ingrassia, N. Kling, M. Lafky, J. Laster, R.C. Lee, V. Litvinenko, Y. Luo, W.W. MacKay, M. Mapes, G. Marr, A. Marusic, K. Mernick, R. Michnoff, M. Minty, C. Montag, J. Morris, C. Naylor, S. Nemesure, F. Pilat, V. Ptitsyn, G. Robert-

Demolaize, T. Roser, P. Sampson, T. Satogata, V. Schoefer, C. Schultheiss, F. Severino, T. Shrey, K. Smith, S. Tepikian, P. Thieberger, D. Trbojevic, N. Tsoupas, J.E. Tuozzolo, M. Wilinski, A. Zaltsman, K. Zeno, S.Y. Zhang, **Medium energy heavy ion operations at RHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 2220-222
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thp054.pdf

72. D. Kayran, Z. Altinbas, D.R. Beavis, I. Ben-Zvi, R. Calaga, D.M. Gassner, H. Hahn, L.R. Hammons, A.K. Jain, J.P. Jamilkowski, N. Laloudakis, R.F. Lambiase, D.L. Lederle, V. Litvinenko, G.J. Mahler, G.T. McIntyre, W. Meng, B. Oerter, D. Pate, D. Phillips, J. Reich, T. Roser, C. Schultheiss, B. Sheehy, T. Srinivasan-Rao, R. Than, J.E. Tuozzolo, D. Weiss, W. Xu, A. Zaltsman, **Status of high current R&D energy recovery linac at Brookhaven National Laboratory**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 2148-2150
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thp006.pdf

73. V. Litvinenko, I. Ben-Zvi, Y. Hao, C.C. Kao, D. Kayran, J.B. Murphy, V. Ptitsyn, T. Roser, D. Trbojevic, N. Tsoupas, **FEL potential of eRHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 2151-2153 (CHECK TUPA22 OR THP007)
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tupa22.pdf

74. F. Meot, M. Bai, V. Ptitsyn, V. Ranjbar, Spin code benchmarking at RHIC, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thp103.pdf

75. N. Tsoupas, D. Kayran, V. Litvinenko, W.W. MacKay, **Design of an achromatic and uncoupled medical gantry for radiation therapy**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 2163-2165
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/thp016.pdf

76. R. Michnoff, L. Arnold, L. Carboni, P. Cerniglia, A. Curcio, L. DeSanto, C. Folz, C. Ho, L. Hoff, R. Hulsart, R. Karl, C. Liu, Y. Luo, W.W. MacKay, G. Mahler, W. Meng, K. Mernick, M. Minty, C. Montag, R. Olsen, J. Piacentino, P. Popken, R. Przybylinski, V. Ptitsyn, J. Ritter, R. Schoefeld, P. Thieberger, J. Tuozzolo, A. Weston, J. White, P. Ziminiski, P. Zimmerman, **RHIC 10 Hz global orbit feedback system**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/mop268.pdf

77. M. Minty, A. Marusic, A. Curcio, C. Dawson, C. Degen, W. Fischer, R. Hulsart, Y. Luo, G. Marr, K. Mernick, R. Michnoff, P. Oddo, V. Ptitsyn, G. Robert-Demolaize, T. Roser, T. Russo, T. Satogata, V. Schoefer, C. Schultheiss, S. Tepikian, M. Wilinski, **Simulatneous orbit, tune, coupling, and chomaticity feedback at RHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/weobn1.pdf

78. E. Wang, I. Ben-Zvi, J. Wang, **Characterization of an SRF Gun: A full wave simulation**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

79. A. Fedotov, M. Bai, M. Blaskiewicz, W. Fischer, D. Kayran, C. Montag, T. Satogata, S. Tepikian, G. Wang, **Beam lifetime and limitations during low-energy RHIC operation**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

80. A.V. Fedotov, I. Ben-Zvi, J. Brodowski, X. Chang, D.M. Gassner, L.T. Hoff, D. Kayran, J. Kewisch, B. Oerter, A. Pendzick, S. Tepikian, P. Thieberger, L.R. Prost, A.V. Shemyakin, **Design aspects of an electrostatic electron cooler for low-energy RHIC operation**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011
http://accelconf.web.cern/ch/AccelConf/PAC2011/papers/thp082.pdf

81. W. Xu, I. Ben-Zvi, R. Calaga, H. Hahn, E.C. Johnson, J. Kewisch, **High current SRF cavity design for SPL and eRHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

82. S.D. Webb, V, Litvinenko, G. Wang, **Effects of e-beams parameters on coherent electron cooling**, Proceedings of 2011 Particle Accelerator Conference, New York, NY, March 28-April 1, 2011, p. 232-234
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/mop066.pdf

83. G. Bell, D. Bruhwiler, B. Schwartz, I. Pogorelov, V.N. Litvinenko, G. Wang, Y. Hao, **Vlasov and PIC simulations of a modulator section for coherent electron cooling**, Proceedings of 2011 Particle Accelerator Conference, New York, NY, March 28-April 1, 2011, p. 235-237
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/mop067.pdf

84. B.T. Schwartz, D.L. Bruhwiler, I. Pogorelov, V.N. Litvinenko, G. Wang, Y. Hao S. Reiche, **Simulations of a single-pass through a coherent electron cooler for 40 GeV/n Au^{+79}**, Proceedings of 2011 Particle Accelerator Conference, New York, NY, March 28-April 1, 2011, p. 244-246
http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/mop074.pdf

85. C. E. Mayes, I. V. Bazarov, S. A. Belomestnykh, D. H. Bilderback, M. G. Billing, J. D. Brock, E. P. Chojnacki, J. A. Crittenden, J. A. Dobbins, B. M. Dunham, R. D. Ehrlich, M. P. Ehrlichman, K. D. Finkelstein, E. Fontes, S. M. Gruner, C. Gulliford, D. L. Hartill, R. G. Helmke, G. H. Hoffstaetter, A. Kazimirov, S. S. Karkare, V. O. Kostroun, F. A. Laham, Y. Li, X. Liu, M. U. Liepe, F. Loehl, L. Cultrera, J. M. Maxson, A. Meseck, A. A. Mikhailichenko, H. S. Padamsee, S. E. Posen, P. G. Quigley, P. Revesz, D. H. Rice, D. C. Sagan, V. D. Shemelin, E. N. Smith, K. W. Smolenski, A. B. Temnykh, M. Tigner, N. R. A. Valles, V. G. Veshcherevich, Y. Xie, Z. Zhao, **Cornell ERL research and development**,

Proceedings of the 2011 Particle Accelerator Conference, New York, NY, March 28 – April 1, 2011 pp. 729-731

86. C.M. Astefanous, J.P. Deacutis, D. Holmes, T. Schultheiss, I. Ben-Zvi, W. Xu, **Design and analysis of SRF cavities for pressure vessel code compliance**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011

87. C. Montag, M. Bai, K.A. Drees, W. Fischer, A. Marusic, G. Wang, **Beam experiments related to the head-on beam-beam compensation project at RHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28-April 1, 2011

88. Y. Hao, V.N. Litvinenko, V. Ptitsyn, **Feedback scheme for kink instability in ERL based electron collider**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 699-700 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tuoan4.pdf

89. Y. Hao, V.N. Litvinenko, V. Ptitsyn, **Ion trapping study in eRHIC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 1109-1011 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tup148.pdf

90. V. Litvinenko, Y. Hao, D. Kayran, D. Trbojevic, **Optics-free x-ray FEL oscillator**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 802-804 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tuods5.pdf

91. D. Trbojevic, J. Beebe-Wang, Y. Hao, V.N. Litvinenko, V. Ptitsyn, D. Kayran, N. Tsoupas, **Lattice design for the future ERL-based electron hadron colliders eRHIC and LHeC**, 2011 Particle Accelerator Conference (PAC'11), New York, NY, March 28 – April 1, 2011, p. 696-698 http://accelconf.web.cern.ch/AccelConf/PAC2011/papers/tuoan3.pdf

92. I. Pogorelsky, M. Polyanskiy, V. Yakimenko, I. Ben-Zvi, P. Shkolnikov, Z. Najmudin, C. A.J. Palmer, N.P. Dover, P. Oliva, M. Carpinelli, **Proton- and x-ray beams from ultra-fast CO2 lasers: Applications in medicine**, proceedings of SPIE Optics & Optoelectronics Volume: 8079A, 2011, Conference 8079A - Laser Acceleration of Electrons, Protons and Ions Prague Congress Ctr. Prague Czech Republic, 18 - 21 April 2011

93. Y. Luo, S. Tepikian, W. Fischer, X. Gu, D. Trbojevic, **The effects of phase advances between interaction points**, Internal Technical Note C-A/AP/426, March 2011 http://www.cadops.bnl.gov/AP/ap_notes/ap_note_426.pdf

94. X. Chang, E. Wang, T. Xin, **Effects of liquid helium bubble formation in a superconducting cavity cryogenic system**, Internal Technical Note C-A/AP/425, March 2011
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_425.pdf

95. Y. Luo, X. Gu, W. Fischer, D. Trbojevic, **Comparison of the dynamic apertures in the RHIC 100 GeV and 250 GeV polarized proton runs**, Internal Technical Note C-A/AP/419, January 2011
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_419.pdf

96. Y. Luo, X. Gu, W. Fischer, D. Trbojevic, **Source of second order chromaticity in RHIC**, Internal Technical Note C-A/AP/418, January 2011
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_418.pdf

97. V.N. Litvinenko, **Gatling gun: high average polarized current injector for eRHIC**, BNL Internal Technical Note C-A/AP/417, January 2011
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_417.pdf

2010

1. V. Danilov, T. Gorlov, V. Ptitsyn, **Creating intense polarized electron beam via laser stripping and spin-orbit interaction**, BNL Internal Technical Note C-A/AP/414, December 2010
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_414.pdf

2. V.N. Litvinenko, J. Beebe-Wang, S. Belomestnykh, I. Ben-Zvi, M.M. Blaskiewicz, R. Calaga, X. Chang, A. Fedotov, D. Gassner, L. Hammons, H. Hahn, Y. Hao, P. He, W. Jackson, A. Jain, E.C. Johnson, D. Kayran, J. Kewisch, Y. Luo, G. Mahler, G. McIntyre, W. Meng, M. Minty, B. Parker, A. Pikin, E. Pozdeyev, V. Ptitsyn, T. Rao, T. Roser, J. Skaritka, B. Sheehy, S. Tepikian, Y. Than, D. Trbojevic, E. Tsentalovich, N. Tsoupas, J. Tuozzolo, G. Wang, S. Webb, Q. Wu, W. Xu, A. Zelenski, **High-energy high-luminosity electron-ion collider eRHIC**, *The EIC Science case: a report on the Joint BNL/INT/JLab program: Gluons and the quark sea at high energies: distributions, polarization, tomography*, Editors: D. Boer, M. Diehl, R. Milner, R. Venugopal, W. Vogelsang, pp. 440-447 (in the paper version), pp. 438-443 (electronic version) INT Workshop on The Science Case for an EIC, November 16 - 19, 2010, Seattle, WA
http://arxiv.org/pdf/1108.1713v1 OR IS IT http://arxiv.org/abs/1109.2819v1

3. V. Shemelin, S. Belomestnykh, **Resistive HOM load for superconducting cavities,** Report ERL 10-1, Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE), 2010
http://www.lns.cornell.edu/public/ERL/2010/ERL10-1/ERL10-1.pdf

4. R. Calaga, **Multipacting simulations for the HP-SPL coupler**, SPL Coupler Workshop, CERN, 2010

5. R. Calaga, W. Fischer, **Long range experiments in RHIC**, ICFA Newsletter, 2010

6. R. Calaga, et. al., **Crab crossing for the LHeC**, LHeC Design Report, 2010

7. V.N. Litvinenko, **Analytical tools in accelerator physics**, BNL Internal Technical Note C-A/AP/406, September 2010
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_406.pdf

8. D. Trbojevic, **Beam lifetime and emittance growth in RHIC under normal operating conditions with the hydrogen gas jets, the cluster-jet and pellet targets**, Internal Technical Note C-A/AP/403, October 2010
http://www.cadops.bnl.gov/AP/ap_notes/ap_note_403.pdf

9. A. Fedotov, A. Sidorin, A. Smirnov, **IBS for non-gaussian distributions**, Proceedings of HB2010 Workshop, Morschach, Switzerland, September 27 – October 1, 2010

10. M. Liepe, S. Belomestnykh, E. Chojnacki, Z. Conway, G. Hoffstaetter, R. Kaplan, S. Posen, P. Quigley, J. Sears, V. Shemelin, V. Veshcherevich, **Status of the Cornell ERL injector SCRF cryomodule,** *Proceedings of the XXV Linear Accelerator Conference*, Tsukuba, Japan, September 12-17, 2010
http://accelconf.web.cern.ch/AccelConf/LINAC2010/papers/tu303.pdf

11. M. Bai, L. Ahrens, I. Alekseev, J. Alessi, E. Courant, A. Drees, W. Fischer, C. Gardner, R. Gill, J. Glenn, H. Huang, V. Litvinenko, A. Luccio, Y. Luo, F. Pilat, W.W. MacKay, Y. Makdisi, A. Marusic, M. Minty, C. Montag, V. Ptitsyn, T. Roser, D. Svrida, T. Satogata, S. Tepikian, D. Trbojevic, N.Tsoupas, A. Zelenski, K. Zeno, S.Y. Zhang, **Observation of snake resonances at RHIC**, Proceedings of SPIN 2010 Symposium, Journal of Physics, Conference Series, v. 295, 012142
http://iopscience.iop.org/1742-6596/295/1/012142/pdf/1642-6596_295_1_012142pdf

12. L. Hammons, H. Hahn, **HOM damping of the fundamental power couplers of the BNL ERL electron gun**, International Workshop on Higher-Order-Mode Damping in Superconducting RF Cavities (2010)

13. V. Litvinenko, I. Ben-Zvi, Y. Hao, C-C. Kao, D. Kayran, J.B. Murphy, V. Ptitsyn, D. Trbojevic, N. Tsoupas, **FEL potential of eRHIC**, Proc. 32nd International Free Electron Laser Conference, Malmo City, Sweden, August 23-27, 2010, pp. 242-245
http://accelconf.web.cern.ch/accelconf/FEL2010/papers/tupa22.pdf

14. G. Wang, V.N. Litvinenko, S.D. Webb, **The physics of FEL in an infinite electron beam**, Proc. 32nd International Free Electron Laser Conference, Malmo City, Sweden, August 23-27, 2010

15. S.D. Webb, V.N. Litvinenko, **A 3-dimensional theory of free electron lasers**, Proc. 32nd International Free Electron Laser Conference, Malmo City, Sweden, August 23-27, 2010

16. S.D. Webb, V.N. Litvinenko, **Dispersion relations for 1D high-gain FELs**, Proc. 32nd International Free Electron Laser Conference, Malmo City, Sweden, August 23-27, 2010

17. Y. Hao, V.N. Litvinenko, **Preliminary study for the OFELO**, Proc. 32nd International Free Electron Laser Conference, Malmo City, Sweden, August 23-27, 2010, p. 554-557
http://accelconf.web.cern.ch/accelconf/FEL2010/papers/thob3.pdf

18. I. Ben-Zvi, **On the Future of BNL User Facilities,** Internal Technical Note C-A/AP/402, August 2010

19. L. Prost, A. Shemyakin, A. Fedotov, J. Kewisch, **Low-energy run of Fermilab electron cooler's beam generation system**, FNAL Preprint FERMILAB-TM-2471-AD, August 2010

20. I. Pinayev, P. Cameron, **Concept of beam position monitorwith frequency multiplexing**, Proceedings of BIW 2010, Santa Fe, NM, May 2-6, 2010, p. 201-204

21. V. Ptitsyn, A. Marusic, R. Michnoff, M. Minty, G. Robert-Demolaize, T. Satogata, **Slow orbit feedback at RHIC**, Proceedings of Beam Instrumentation Workshop, Santa Fe, NM, May 2-6, 2010, TUPSM108

22. K. Vetter, J.H. DeLong, A.J. Della Penna, K.M. Ha, B.N. Kosciuk, J. Mead, I. Pinayev, O. Singh, Y. Tian, **NSLS-II beam position monitor**, Proceedings of BIW 2010, Santa Fe, NM, p. 205-209

23. D. Padrazo, R.P. Fliller, Y. Hu, B.N. Kosciuk, R. Meier, I. Pinayev, T.V. Shaftan, O. Singh, **NSLS-II injector system diagnostics**, Proceedings of BIW 2010, Santa Fe, NM, p. 437-441

24. Y. Hao, V. Ptitsyn, **Beam-beam issues in eRHIC**, ICFA Beam Dynamics Newsletter 52 (August 2010), p. 128

25. A. Fedotov, **Space-charge limitations in a collider**, ICFA Beam Dynamics Newsletter 52 (August 2010), p. 123

26. Y. Luo, K. Brown, W. Fischer, V. Ptitsyn, T. Roser, V. Schoefer, S. Tepikian, D. Trbojevic, **Dynamic aperture calculation for the RHIC 2010 100 GeV Au-Au run lattices**, Internal Technical Note C-A/AP/393, August 2010

27. V. Ptitsyn, Sections of **Siberian Snake and Spin Rotator Designs**, submitted for new edition of Handbook of Accelerator Physics and Engineering (2010)

28. B.T. Schwartz, D.L. Bruhwiler, V.N. Litvinenko, S. Reiche, G.I. Bell, A. Sobol, R. Busby, I. Pogorelov, G. Wang, Y. Hao, **Massively parallel simulation of anisotropic in a free electron laser**, Proc. of SciDAC 2010 Workshop, July 11-15, 2010, Chattanooga, TN

29. R. Calaga, et. al., **LHC crab-cavity aspects and strategy**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010

30. R. Calaga, et. al., **Single-pass beam measurements for the verification of the LHC magnetic model**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010

31. R. Calaga, et. al., **RHIC BBLR**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010

32. R. Calaga, et. al., **Linear and chromatic optics measurements at RHIC**, 1st Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010

33. K.A. Brown, L. Ahrens, M. Bai, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, D. Bruno, C. Carlson, R. Connolly, T. D'Ottavio, R. DeMaria, K.A. Drees, W. Fischer, W. Fu, C.J. Gardner, D. Gassner, J.W. Glenn, Y. Hao, M. Harvey, T. Hayes, L.T. Hoff, H. Huang, J.S. Laster, R.C. Lee, V. Litvinenko, Y. Luo, W.W. MacKay, M. Mapes, G. Marr, A. Marusic, K. Mernick, R. Michnoff, M. Minty, C. Montag, J. Morris, S. Nemesure, B. Oerter, F. Pilat, V. Ptitsyn, G. Robert-Demolaize, T. Roser, T. Russo, P. Sampson, J. Sandberg, T. Satogata, V. Schoefer, C. Schultheiss, F. Severino, K. Smith, D. Steski, S. Tepikian, C. Theisen, P. Thieberger, D. Trbojevic, N.Tsoupas, J.E. Tuozzolo, G. Wang, M. Wilinski, A. Zaltsman, K. Zeno, S.Y. Zhang, **RHIC performance for FY10 200 GeV Au+Au heavy ions**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 507-509
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/mopec023.pdf

34. F. Zimmermann, …, V.N. Litvinenko, et. al., **Interaction-region design options for linac-ring LHeC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1605-1607
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/tupeb037.pdf

35. F. Zimmerman, …, V.N. Litvinenko, et. al., **Designs for a linac-ring LHeC**, 1st International Particle Accelertor Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1611-1613
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/tupeb039.pdf

36. G. Wang, M. Blaskiewicz, V.N. Litvinenko, **Progress of analytical modeling of coherent electron cooling**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 873-875
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/mopd077.pdf

37. V.S. Morozov, S.A. Bogacz, D. Trbojevic, **Muon acceleration with RLA and non-scaling FFAG arcs**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 3539 http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/wepe084.pdf

38. N. Malitsky, I. Pinayev, R.M. Talman, C. Xiaomeng, **Application of model independent analysis with EPICS-DDS**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 2675

39. T.V. Shaftan, A. Blednykh, W.R. Casey, L.R. Dalesio, R. Faussete, M.J. Ferreira, R.P. Fliller, G.S. Fries, G. Ganetis, W. Guo, R. Heese, H-C. Hseuh, Y. Hu, P.K. Job, E.D. Johnson, Y. Kawashima, B.N. Kosciuk, S. Kowalski, S. Krinsky, Y. Li, M. Ha, R. Meier, S. Ozaki, D. Padrazo, B. Parker, I.Pinayev, M. Rehak, J. Rose, S. Sharma, O. Singh, P. Singh, J. Skaritka, C.J. Spataro, G.M. Wang, F.J. Willeke, L-H. Yu, **Status of the NSLS-II injection system development**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 2672

40. R.P. Fliller, W.R. Casey, R. Faussete, H. Fernandes, G. Ganetis, R. Heese, H-C. Hseuh, P.K. Job, B.N. Kosciuk, R. Meier, D. Padrazo, I. Pinayev, J. Rose, T.V. Shaftan, O. Singh, J. Skaritka, C.J. Spataro, G.M. Wang, **NSLS-II transport line performance**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1820

41. D. Trbojevic, J. Beebe-Wang, N. Tsoupas, X. Chang, D. Kayran, V. Ptitsyn, V. Litvinenko, Y. Hao, B. Parker, E. Pozdeyev, **Lattice design for the ERL electron ion collider in eRHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p.127 http://accelconf.web.cern.ch/accelconf/IPAC10/papers/mopea028.pdf

42. D. Trbojevic, **Update on the innovative carbon/proton non-scaling FFAG isocentric gantries for cancer therapy**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 124 http://accelconf.web.cern.ch/accelconf/IPAC10/papers/mopea026.pdf

43. C. Montag, L. Ahrens, M. Bai, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, R. Connolly, T. D'Ottavio, K.A. Drees, A.V. Fedotov, W. Fischer, G. Ganetis, C.J. Gardner, J.W. Glenn, H. Hahn, M. Harvey, T. Hayes, H. Huang, P.F. Ingrassia, J.P. Jamilkowski, D. Kayran, J. Kewisch, R.C. Lee, D.I. Lowenstein, A.U. Luccio, Y. Luo, W.W. MacKay, Y. Makdisi, N. Malitsky, G.J. Marr, A. Marusic, M.P. Menga, R.J. Michnoff, M.G. Minty, J. Morris, B. Oerter, F.C. Pilat, P.H. Pile, E. Pozdeyev, V. Ptitsyn, G. Robert-Demolaize, T. Roser, T. Russo, T. Satogata, V. Schoefer, C. Schultheiss, F. Severino, M. Sivertz, K. Smith, S. Tepikian, P. Thieberger, D. Trbojevic, N. Tsoupas, J.E. Tuozzolo, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, **RHIC performance as a 100 GeV polarized proton collider in Run-9**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p.531

44. G. Wang, M. Blaskiewicz, V.N. Litvinenko, **Progress on analytical modeling of coherent electron cooling**, 1st International Particle Accelerator Conference, IPAC'10, Kyoto, Japan, May 23-28, 2010, p. 873-875
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/mopd077.pdf

45. Q. Wu, I. Ben-Zvi, X. Chang, J. Skaritka, **Simulations for preliminary design of a multi-cathode dc electron gun for eRHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1599
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/tupeb035.pdf

46. Y. Hao, P. He, A. Jain, G. Mahler, W. Meng, J. Tuozzolo, V. Litvinenko, **Small gap magnet prototype measurements for eRHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1614-1616
http://accelconf.web.cern.ch/accelconf/IPAC2009/papers/tupeb040.pdf

47. Y. Hao, V. Litvinenko, V. Ptitsyn, **Study of beam-beam effects in eRHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1617
http://accelconf.web.cern.ch/accelconf/IPAC10/papers/tupeb041.pdf

48. Y. Hao, V. Litvinenko, E. Pozdeyev, V. Ptitsyn, D. Trbojevic, N. Tsoupas, **The transverse linac optics design in multi-pass ERL**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1620, http://accelconf.web.cern.ch/accelconf/IPAC10/papers/tupeb042.pdf

49. E. Wang, I. Ben-Zvi, A. Burrill, J. Kewisch, T. Rao, Q. Wu, D. Holmes, **Quantum efficiency, temporal response and lifetime of GaAs cathode in SRF electron gun**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1764
http://accelconf.web.cern.ch/accelconf/IPAC10/papers/tupec023.pdf

50. E. Wang, I. Ben-Zvi, A. Burrill, J. Kewisch, T. Rao, Q. Wu, D. Holmes, **Heat load of a P-Doped GaAs photocathode in an SRF electron gun**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1767
http://accelconf.web.cern.ch/accelconf/IPAC10/papers/tupec024.pdf

51. Y. Luo, W. Fischer, D. Trbojevic, **Sorting chromatic sextupoles for second order chromaticity correction in the RHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010
http://accelconf.web.cern.ch/accelconf/IPAC10/papers/thpe103.pdf

52. J. Smedley, I. Ben-Zvi, X. Chang, P.D. Johnson, J. Rameau, T. Rao, Q. Wu, J. Bohon, E.M. Muller, **Electron transport and emission in diamond**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 2132
http://accelconf.web.cern.ch/accelconf/IPAC10/papers/tupd100.pdf

53. I. Ben-Zvi, R. Calaga, H. Hahn, L.R. Hammons, E.C. Johnson, D. Kayran, J. Kewisch, V. Litvinenko, W. Xu, **Beam break-up estimates for the ERL at BNL**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 2441-2443
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/weobra03.pdf

54. Q. Wu, I. Ben-Zvi, **Simulation of the high-pass filter for 56 MHz cavity for RHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 3078
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/wepec085.pdf

55. Q. Wu, I. Ben-Zvi, **Optimization of higher order mode dampers in the 56 MHz SRF cavity for RHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 3081
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/wepec086.pdf

56. M. Minty, R. Hulsart, A. Marusic, R. Michnoff, V. Ptitsyn, G. Robert-Demolaize, T. Satogata, **Global orbit feedback in RHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/mopec029.pdf

57. V. Ptitsyn, M. Blaskiewicz, W. Fischer, R. Lee, S.Y. Zhang, **Measurements of fast transition instability in RHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/tupeb053.pdf

58. G. Wang, M. Blaskiewicz, A. Fedotov, Y. Hao, J. Kewisch, V.N. Litvinenko, E. Pozdeyev, V. Ptitsyn, **Studies of beam dynamics for eRHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 1889, http://accelconf.web.cern.ch/accelconf/IPAC10/papers/tupec075.pdf

59. V.N. Litvinenko, **Future electron-hadron colliders**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, p. 2364-2368, http://accelconf.web.cern.ch/accelconf/IPAP10/papers/wexmh02.pdf

60. V. Ptitsyn, M. Bai, T. Roser, **Spin tune dependence on closed orbit in RHIC**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 23-28, 2010, http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/thpe054.pdf

61. A. Wheelhouse, P.R. Davies, J.L. Fernández-Hernando, E. Frangleton, P. McIntosh, A. Moss, J. Orrett, J. Strachan, C.D. Beard, S. Belomestnykh, P. Quigley, V. Veshcherevich, **Daresbury international cryomodule coupler progress.** *Proceedings of the 1st International Particle Accelerator Conference*, Kyoto, Japan, May 24-27, 2010, pp. 2998-3000
http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/wepec048.pdf

62. V. Shemelin, S. Belomestnykh, **Using a resistive material for HOM damping,** *Proceedings of the 1st International Particle Accelerator Conference*, Kyoto, Japan, May 24-27, 2010, pp. 3037-3039 http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/wepec063.pdf

63. M. Liepe, S. Belomestnykh, E. Chojnacki, Z. Conway, G. Hoffstaetter, R. Kaplan, S. Posen, P. Quigley, J. Sears, V. Shemelin, V. Veshcherevich, **Latest results and test plans from the 100 mA Cornell ERL injector SCRF cryomodule,** *Proceedings of the 1st International Particle Accelerator Conference*, Kyoto, Japan, May 24-27, 2010, pp. 3043-3045 http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/wepec066.pdf

64. F. Loehl, I. Bazarov, S. Belomestnykh, M. Billing, E. Chojnacki, Z. Conway, J. Dobbins, B. Dunham, R. Ehrlich, M. Forster, S. M. Gruner, C. Gulliford, G. Hoffstaetter, V. Kostroun, M. Liepe, Y. Li, X. Liu, H. Padamsee, D. Rice, V. Shemelin, E. Smith, K. Smolenski, M. Tigner, V. Veshcherevich, Z. Zhao, **High current and high brightness electron sources,** *Proceedings of the 1st International Particle Accelerator Conference*, Kyoto, Japan, May 24-27, 2010, pp. 45-49, http://accelconf.web.cern.ch/AccelConf/IPAC10/papers/mozra01.pdf

65. G. Wang, M. Bai, L. Yang, **Linear optics measurements and corrections using an AC dipole in RHIC**, 1st International Particle Accelerator Conference, Kyoto, Japan, May 23-28, 2010

66. P. A. McIntosh, …, S. Belomestnykh, et al., **Cryomodule development at Daresbury Laboratory,** *ICFA Beam Dynamics Newsletter* No. 51 (April 2010), pp. 170-182, http://www-bd.fnal.gov/icfabd/Newsletter51.pdf

67. N. Tsoupas, L. Ahrens, M. Bai, K. Brown, E. Courant, J.W. Glenn, H. Huang, A. Luccio, W.W. MacKay, T. Roser, V. Schoefer, K. Zeno, **Acceleration of polarized protons in the AGS**, Internal Technical Note C-A/AP/391, February 2010

68. N. Tsoupas, H. Huang, W.W. MacKay, T. Roser, D. Trbojevic, **The AGS with four helical magnets**, Internal Technical Note C-A/AP/390, February 2010

69. R. Calaga, et. al., **Crab cavities**, Chamonix Workshop, January 29, 2010

70. D. Pate, I. Ben-Zvi, T. Rao, A. Burrill, R. Todd, J. Smedley (BNL), D. Holmes (AES), **R&D ERL: photocathode deposition and transport system,** Internal Technical Note C-A/AP/374, January 2010

71. H. Hahn, I. Ben-Zvi, R. Calaga, L. Hammons, V.N. Litvinenko, W. Xu, **R&D ERL: HOM absorbers**, Internal Technical Note C-A/AP/369, January 2010 http://www.cadops.bnl.gov/AP/ap_notes/ap_note_369.pdf

2009

1. E.M. Muller, J. Smedley, B. Raghothamachar, M. Gaowei, J.W. Keister, I. Ben-Zvi, M. Dudley, Q. Wu, **Electronic impact of inclusions in diamond**, Proceedings 2009 Materials Research Society Fall Meeting, Boston, MA, November 2009

2. H. Hahn, I. Ben-Zvi, L.R. Hammons, W. Xu, **HOM absorbers for ERL cryomodules at BNL**, Proc. SRF, Berlin-Dresden, Germany, p. 625 (2009)

3. V. Veshcherevich, S. Belomestnykh, **Input coupler for main linac of Cornell ERL,** *Proceedings of the 14th International Conference on RF Superconductivity,* Berlin, Germany, September 20-25, 2009, pp. 543-545 http://accelconf.web.cern.ch/AccelConf/srf2009/papers/thppo009.pdf

4. P. McIntosh, …, S. Belomestnykh, et al., **Assembly preparations for the international ERL cryomodule at Daresbury Laboratory.** *Proceedings of the 14th International Conference on RF Superconductivity,* Berlin, Germany, September 20-25, 2009, pp. 864-868 http://accelconf.web.cern.ch/AccelConf/srf2009/papers/thppo098.pdf

5. M. Liepe, S. Belomestnykh, et al.. **The Cornell high-current ERL injector cryomodule,** *Proceedings of the 14th International Conference on RF Superconductivity,* Berlin, Germany, September 20-25, 2009, pp. 27-33 http://accelconf.web.cern.ch/AccelConf/srf2009/papers/moobau04.pdf

6. X. Chang, I. Ben-Zvi, **Geometric optimization of the 56MHz SRF cavity and its frequency table,** Internal Technical Note C-A/AP/331, September 2009

7. V.N. Litvinenko, V. Yakimenko, **Experiment on suppression of spontaneous undulator radiation at ATF**, Proceedings of the 31st International Free Electron Conference, Liverpool, UK, August 23-28, 2009, p. 204-207 http://accelconf.web.cern.ch/AccelConf/FEL2009/papers/mopc82.pdf

8. V.N. Litvinenko, **Suppression of short noise and spontaneous radiation in electron beams**, Proceedings of the 31st International Free Electron Conference, Liverpool, UK, August 23-28, 2009, p. 229-234 http://accelconf.web.cern.ch/AccelConf/FEL2009/papers/tuob05.pdf

9. S.D. Webb, V.N. Litvinenko, **Evolution of electron beam phase space distibutiron in a high-gain FEL**, Proceedings of the 31st International Free Electron Conference, Liverpool, UK, August 23-28, 2009, p. 208-210 http://accelconf.web.cern.ch/AccelConf/FEL2009/papers/mopc83.pdf

10. V.N. Litvinenko, **LHeC and eRHIC**, Proc. of the 2009 Europhysics Conference on High Energy Physics, Krakow, Poland, July 16-22, 2009 http://www.bnl.gov/isd/documents/70608.pdf

11. A. Fedotov, **Luminosity improvement of low-energy RHIC with cooling**, 5th International Workshop on Critical Point and Onset of Deconfinement (CPOD 2009), Upton, NY, June 8-12, 2009, 053

12. T. Satogata, L. Ahrens, M. Bai, M. Brennan, D. Bruno, J. Butler, A. Drees, A. Fedotov, W. Fischer, M. Harvey, T. Hayes, W. Jappe, R. Lee, W. MacKay, G. Marr, R. Michnoff, B. Oerter, E. Pozdeyev, T. Roser, V. Schoefer, F. Severino, K. Smith, S. Tepikian, N. Tsoupas, **RHIC low-energy challenges and plans**, 5th International Workshop on Critical Point and Onset of Deconfinement (CPOD 2009), Upton, NY, June 8-12, 2009, 052

13. J. Kewisch, I. Ben-Zvi, A. Burrill, D. Pate, T. Rao, R.J. Todd, E. Wang, Q. Wu, H. Bluem, D. Holmes, T. Schultheiss, **An experiment to test the viability of a gallium-arsenide cathode in a SRF electron gun**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada, pp. 470-472
http://trshare.triumf.ca/~pac09proc/Proceedings/papers/mo6rfp049.pdf

14. E. Pozdeyev, D. Kayran, V.N. Litvinenko, **Ion bombardment in rf photoguns**, Proceedings of the 23rd Particle Accelerator Conference May 4-8, 2009, Vancouver, British Columbia, Canada
http://trshare.triumf.ca/~pac09proc/Proceedings/papers/mo6rfp050.pdf

15. A. Burrill, I. Ben-Zvi, R. Calaga, T. D'Ottavio, L.R. Dalesio, D.M. Gassner, H. Hahn, L.T. Hoff, A. Kayran, J. Kewisch, R.F. Lambiase, D.L. Lederle, V. Litvinenko, G.J. Mahler, G.T. McIntyre, B. Oerter, C. Pai, D. Pate, D. Phillips, E. Pozdeyev, C. Schultheiss, L. Smart, K. Smith, T.N. Tallerico, J.E. Tuozzolo, D. Weiss, A. Zaltsman, **BNL 703 MHz SRF cryomodule demonstration**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada
http://trshare.triumf.ca/~pac09proc/Proceedings/papers/tu5pfp033.pdf

16. G. Wang, M.Blaskiewicz, V.N. Litvinenko, **Analytical studies of coherent electron cooling**, Proceedings of the 23rd Particle Accelerator Conference, May 4-8, 2009, Vancouver, British Columbia, Canada, p. 1460-1462
http://trshare.triumf.ca/~pac09proc/Proceedings/papers/tu6pfp074.pdf

17. F.C. Pilat, M. Bai, D. Bruno, P. Cameron, A. Drees, V.N. Litvinenko, Y. Luo, N. Malitsky, G.J. Marr, A. Marusic, V. Ptitsyn, T. Satogata, S. Tepikian, D. Trbojevic, **Reduction of Beta* and increase of luminosity at RHIC**, Proceedings of the 23rd Particle Accelerator Conference, May 4-8, 2009, Vancouver, British Columbia, Canada
http://trshare.triumf.ca/~pac09proc/Proceedings/papers/we6pfp008.pdf

18. H. Hahn, S. Bellavia, I. Ben-Zvi, E. M. Choi, **Design of the fundamental mode damper and the HOM dampers for the 56 MHz SRF cavity**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada

19. V. Ptitsyn, A.J. Della Penna, V.N. Litvinenko, N. Malitsky, T. Satogata, **Beta* and Beta-waist measurement and control at RHIC**, Proceedings of the 23rd Particle Accelerator Conference, May 4-8, 2009, Vancouver, British Columbia, Canada http://trshare.triumf.ca/~pac09proc/Proceedings/papers/we6pfp061.pdf

20. G. Wang, M. Bai, V.N. Litvinenko, T. Satogata, **The correction of linear lattice gradient errors using an AC dipole**, Proceedings of the 23rd Particle Accelerator Conference, May 4-8, 2009, Vancouver, British Columbia, Canada http://trshare.triumf.ca/~pac09proc/Proceedings/papers/th6pfp066.pdf

21. I. Ben-Zvi, D. Naik, **Ripple structure in 56 MHz quarter wave resonator for multipacting suppression**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada

22. V.N. Litvinenko, **Coherent electron cooling**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada, http://trshare.triumf.ca/~pac09proc/Proceedings/papers/fr1gri01.pdf

23. G. Wang, M. Blaskiewicz, V.N. Litvinenko, **Studies of coherent electron cooling**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada http://trshare.triumf.ca/~pac09proc/Proceedings/papers/tu6pfp074.pdf

24. A.V. Fedotov, I. Ben-Zvi, **Beam dynamics and expected RHIC performance with 56 MHz rf upgrade**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada

25. A. Fedotov, **IBS and luminosity improvement for RHIC below transition energy**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada

26. Y. Luo, M. Bai, J. Beebe-Wang, J. Bengtsson, R. Calaga, W. Fischer, A. Jain, F. Pilat, V. Ptitsyn, N. Malitsky, G. Robert-Demolaize, T. Satogata, S. Tepikian, R. Tomas, D. Trbojevic, **Overview of magnetic nonlinear beam dynamics in the RHIC**, Proceedings of the 23rd Particle Accelerator Conference May 4-8, 2009, Vancouver, British Columbia, Canada

27. R. Calaga, et.al., **Transverse impedance localization using intensity dependent optics**, Proceedings of the 23rd Particle Acclerator Conference, May 4-8, 2008, Vancouver, British Columbia, Canada

28. V. Ptitsyn, J. Beebe-Wang, I. Ben-Zvi, A. Burrill, R. Calaga, X. Chang, A.V. Fedotov, H. Hahn, L.R. Hammons, Y. Hao, A. Kayran, V. Litvinenko, G.J. Mahler, C. Montag, B. Parker, A. Pendzick, S.R. Plate, E. Pozdeyev, T. Roser, S. Tepikian, D. Trbojevic, N. Tsoupas, J.E. Tuozzolo, G. Wang, E. Tsentalovich, **MeRHIC – Staging Approach to eRHIC**, Proceedings of the 23rd Particle

Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada, pp. 2643-2645
http://accelconf.web.cern.ch/accelconf/PAC2009/papers/we6pfp062.pdf

29. M. Bai, L. Ahrens, J. Alessi, G. Atonian, A. Bazilevsky, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K. Brown, D. Bruno, J. Butler, R. Connolly, T. D'Ottavio, A. Drees, W. Fischer, G. Ganetis, C. Gardner, R. Gill, J. Glenn, T. Hayes, Y. Hao, H. Huang, R. Hulsart, D. Kayran, J. Laster, R. Lee, A. Luccio, Y. Luo, W.W. MacKay, Y. Makdisi, G. Marr, A. Marusic, K. Mernick, G. McIntyre, R. Michnoff, M. Minty, C. Montag, B. Morozov, J. Morris, P. Oddo, B. Oerter, F. Pilat, V. Ptitsyn, D. Raparia, G. Robert-Demolaize, T. Roser, T. Russo, T. Satogata, V. Schoefer, K. Smith, D. Svirida, D. Trbojevic, N. Tsoupas, J. Tuozzolo, G. Wang, M. Wilinski, S. Tepikian, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, **First polarized proton collisions at a beam energy of 250 GeV in RHIC**, Proceedings of the 23rd Particle Accelerator Conference, May 4-8, 2009, Vancouver, British Columbia, Canada, p. 91-93

30. A.E. Candel, A.C. Kabel, K. Ko, L. Lee, Z. Li, C.-K. Ng, G.L. Schussman. I Ben-Zvi, J. Kewisch, **Parallel 3D finite element particle-in-cell simulations with Pic3P**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada

31. W. Meng, J. Bengtsson, Y. Hao, G. Mahler, J. Tuozzolo, V.N. Litvinenko, **Small gap magnets and vacuum chamber for eRHIC**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada, pp. 133-135
http://accelconf.web.cern.ch/accelconf/PAC2009/papers/mo6pfp004.pdf

32. Y. Hao, V. Litvinenko, V. Ptitsyn, **Beam-beam interaction study of medium energy eRHIC**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, pp. 2628-2630
http://accelconf.web.cern.ch/accelconf/PAC2009/papers/we6pfp057.pdf

33. Y. Hao, V. Litvinenko, V. Ptitsyn, **Electron pinch effect in beam-beam interaction of ERL based eRHIC**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada, pp. 2631-2633, http://accelconf.web.cern.ch/accelconf/PAC2009/papers/we6pfp058.pdf

34. R. Busby, J.R. Cary, D.A. Dimitrov, I. Ben-Zvi, X. Chang, J. Keister, E.M. Muller, T. Rao, J. Smedley, Q. Wu, **3D simulations of secondary electron generation and transport in a diamond electron beam amplifier**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada
http://trshare.triumf.ca/~pac09proc/Proceedings/papers/fr5pfp081.pdf

35. D.A. Dimitrov, R. Busby, J.R. Cary, I. Ben-Zvi, X. Chang, J. Keister, E.M. Muller, T. Rao, J. Smedley, Q. Wu, **Investigation of charge gain in diamond electron**

beam amplifiers via 3D simulations, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada http://trshare.triumf.ca/~pac09proc/Proceedings/papers/fr5pfp082.pdf

36. J. Crittenden, …, S. Belomestnykh, et al., **Developments for Cornell's x-ray ERL,** *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009, pp. 106-108 http://accelconf.web.cern.ch/AccelConf/PAC2009/papers/mo4pbc03.pdf

37. I. Bazarov, S. Belomestnykh, et al., **Initial beam results from the Cornell high-current ERL injector prototype,** *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009, pp. 683-687 http://accelconf.web.cern.ch/AccelConf/PAC2009/papers/tu2gri01.pdf

38. M. Liepe, S. Belomestnykh, et al., **SRF experience with the Cornell high-current ERL injector prototype,** *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009, pp. 694-698 http://accelconf.web.cern.ch/AccelConf/PAC2009/papers/tu3rai01.pdf

39. P. McIntosh, …, S. Belomestnykh, et al., **Preparations for assembly of the international ERL cryomodule at Daresbury Laboratory,** *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009, pp. 2113-2115 http://accelconf.web.cern.ch/AccelConf/PAC2009/papers/we5pfp050.pdf

40. E. Chojnacki, S. Belomestnykh, et al., **Design of an ERL linac cryomodule,** *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009, pp. 2781-2783 http://accelconf.web.cern.ch/AccelConf/PAC2009/papers/we6rfp002.pdf

41. T. Satogata, L. Ahrens, M. Bai, J.M. Brennan, D. Bruno, J. Butler, A. Drees, A. Fedotov, W. Fischer, M. Harvey, T. Hayes, W. Jappe, R.C. Lee, W.W. MacKay, N. Malitsky, G. Marr, R. Michnoff, B. Oerter, E. Pozedeyev, T. Roser, F. Severino, K. Smith, S. Tepikian, N. Tsoupas, **RHIC low-energy tests and initial operations,** *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009

42. V. Yakimenko, P. Muggli, M. Babzien, A. Fedotov, K.P. Kusche, J. Park, I. Pogorelsky, **Generation of bunch trains and its applications**, *Proceedings of the 2009 Particle Accelerator Conference,* Vancouver, BC, Canada, May 4-8, 2009

43. O. Singh, R. Alforque, B. Bacha, A. Blednykh, P. Cameron, W.X. Cheng, L.R. Dalesio, A.J. Della Penna, L. Doom, R.P. Fliller, G. Ganetis, R. Heese, H-C. Hseuh, E.D. Johnson, B.N. Kosciuk, S.L. Kramer, S. Krinsky, J. Mead, S. Ozaki, D. Padrazo, I. Pinayev, V. Ravindranath, J. Rose, T.V. Shaftan, S. Sharma, J. Skaritka, T. Tanabe, Y. Tian, F.J. Willeke, L-H. Yu, **NSLS-II beam diagnostic**

overview, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, p. 746-770

44. P. Cameron, B. Bacha, A. Blednykh, I. Pinayev, O. Singh, **Results from a test fixture for button BPM trapped mode measurements**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, p. 3389-3391

45. P. Cameron, A. Blednykh, B.N. Kosciuk, I. Pinayev, V. Ravindranath, O. Singh, **BPM button optimization to minimize distortion due to trapped mode heating**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, p. 3462-3464

46. B.N. Kosciuk, R. Alforque, B. Bacha, P. Cameron, F. Lincoln, I. Pinayev, V. Ravindranath, S. Sharma, O. Singh, **Development of high stability supports for NSLS-II rf BPMs**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, p. 3465-346

47. I. Pinayev, A. Blednykh, **Evaluation of heat dissipation in the BPM buttons**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, 3471-3472

48. I. Pinayev, B.N. Kosciuk, O. Singh, **Preliminary design of pinhole camera for NSLS-II project**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, p. 3473-3475

49. I. Pinayev, O. Singh, G. Decker, **Comparison of rf BPM receivers for NSLS-II project**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada, p. 3476-3478

50. R. Calaga, et. al., **Status of LHC crab cavity simulations and beam studies**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada

51. R. Calaga, et. al., **Status of LHC crab cavity cryostat**, Proceedings of the 23rd Particle Accelerator Conference 4-8 May 2009, Vancouver, British Columbia, Canada

52. I. Paul, D.A. Dimitrov, R. Busby, D.L. Bruhwiler, D. Smithe, J.R. Cary, J. Kewisch, D. Kayran, R. Calaga, I. Ben-Zvi, **Half-Cell rf gun simulations with the electromagnetic particle-in-cell code VORPAL**, AIP Conf. Proc. – January 22, 2009 – Volume 1086, p. 334-339

53. A.V. Fedotov, I. Ben-Zvi, X. Chang, D. Kayran, V.N. Litvinenko, A. Pendzick, T. Satogata, **Electron cooling for low-energy RHIC program**, Proceedings Workshop on Beam Cooling and Related Topics (COOL09), Lanzhou, China, August 31-September 4, 2009

54. A. Smirnov, A. Sidorin, D. Krestnikov, C. Bhat, L. Prost, A. Fedotov, **Longitudinal dynamics with rf in BETACOOL**, Proceedings Workshop on Beam Cooling and Related Topics (COOL09), Lanzhou, China, August 31-September 4, 2009

55. O. Singh, I. Pinayev, G. Decker, B.X. Yang, **Comparative studies of rf beam position monitor technologies for NSLS-II**, Proceedings of DIPAC 2009, Basel, Switzerland, p. 80-82

56. I. Ben-Zvi, **Quench propagation in the HOM damper of the 56 MHz cavity,** Internal Technical Note C-A/AP/358, August 2009

57. Y. Semertzidis, B. Marciano, B. Morse, A. Fedotov, E. Stephenson, F. Lin, G. Onderwater, D. Lazarus, M. Blaskiewicz, P. Cameron, **Proton EDM R&D Report**, (BNL, June 2009)

58. R. Calaga, et. al., **Polarity checks in sectors 23 & 78**, LHC-Performance-Note-010, 2009

59. Y. Luo, M. Bai, J. Beebe-Wang, W. Fischer, C. Montag, G. Robert-Demolaize, T. Satogata, S. Tepikian, D. Trbojevic, **Dynamic aperture evaluation of the proposed lattices for the RHIC 2009 polarized proton run**, Internal Technical Note C-A/AP/349, January 2009

60. Y. Luo, S. Tepikian, W. Fischer, G. Robert-Demolaize, D. Trbojevic, **Sorting chromatic sextupoles for easily and effectively correcting second order chromaticity in the Relativistic Heavy Ion Collider**, Internal Technical Note C-A/AP/348, January 2009

61. I. Ben-Zvi, **Superconducting storage cavity for RHIC,** Internal Technical Note C-A/AP/337, January 2009

62. D. Naik, I. Ben-Zvi, **Multipacting simulation study for 56 MHz Quarter Wave Resonator using 2D code**, Internal Technical Note C-A/AP/343, January 2009

2008

1. N. Tsoupas, J.W. Glenn, H. Huang, W.W. MacKay, D. Raparia, K. Zeno, **Matching the BtA line to the bare-AGS (Part 1)**, Internal Technical Note C-A/AP/335, November 2008

2. M. Bai, V. Ptitsyn, T. Roser, **Impact on spin tune from horizontal orbital angle between snakes and orbital angle between spin rotators**, Internal Technical Note C-A/AP/334, October 2008

3. C. Montag, M. Bai, W.W. MacKay, T. Roser, N. Abreu, L. Ahrens, D. Barton, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, G. Bunce, R.

Calaga, P. Cameron, R. Connolly, T. D'Ottavio, A. Drees, A.V. Fedotov, W. Fischer, G. Ganetis, C. Gardner, J. Glenn, T. Hayes, H. Huang, P. Ingrassia, D. Kayran, J. Kewisch, R.C. Lee, F. Lin, V.N. Litvinenko, A.U. Luccio, Y. Luo, Y. Makdisi, N. Malitsky, G. Marr, A. Marusic, R. Michnoff, J. Morris, B. Oerter, F. Pilat, P. Pile, G. Robert-Demolaize, T. Russo, T. Satogata, C. Schultheiss, M. Sivertz, K. Smith, S. Tepikian, D. Trbojevic, N. Tsoupas, J. Tuozzolo, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, **RHIC proton performance in Run-8**, Proc. of SPIN2008, October 2008

4. C. Montag, N. Abreu, L. Ahrens, M. Bai, D. Barton, A. Bazilevsky, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, G. Bunce, R. Calaga, P. Cameron, R. Connolly, T. D'Ottavio, A. Drees, A.V. Fedotov, W. Fischer, G. Ganetis, C. J. Gardner, J. W. Glenn, T. Hayes, H. Huang, P. Ingrassia, D.A. Kayran, J. Kewisch, R.C. Lee, V.N. Litvinenko, A.U. Luccio, Y. Luo, W.W. MacKay, Y. Makdisi, N. Malitsky, G. Marr, A. Marusic, R. Michnoff, J. Morris, B. Oerter, H. Okada, F. Pilat, P. Pile, G. Robert-Demolaize, T. Roser, T. Russo, T. Satogata, C. Schultheiss, M. Sivertz, K. Smith, S. Tepikian, D. Trbojevic, N. Tsoupas, J. Tuozzolo, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, **RHIC polarized proton performance in Run-8**, Proc. 18th International Spin Physics Symposium, University of VA, Charlottesville, VA, October 6-11, 2008, http://www.bnl.gov/isd/documents/70576.pdf

5. Yu. Shatunov, S. Mane, V.I. Ptitsyn, **Analysis of data for stored polarized beams using a spin flipper**, Proc. 18th International Spin Physics Symposium, University of VA, Charlottesville, VA, October 6-11, 2008, AIP Conf. Proc. Vol. 1149, p. 813-16 http://scitation.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=APCPCS001149000001000735000001&idtype=cvips&gifs=yes

6. E. Pozdeyev, D. Kayran, V.N. Litvinenko, **Ion bombardment in rf guns**, 18th International Symposium on Spin Physics, SPIN08, Charlottesville, VA, October 6-11, 2008, AIP Conf. Proc. Vol. 1149, p. 1109-1113

7. T. Tsang, S. Bellavia, R. Connolly, D. Gassner, Y. Makdisi, T. Russo, P. Thieberger, D. Trbojevic, A. Zelenski, **A new luminescence beam profile monitor for intense proton and heavy ion beams**, Internal Technical Note C-A/AP/330, October 2008

8. O. Singh, I. Pinayev, **Overview of beam instrumentation and diagnostics for the NSLS-II project**, Proceedings of BIW 2008, Tahoe City, CA, p. 222-226

9. M.G. Fedurin, I. Pinayev, **Coupling correction in NSLS X-ray ring**, Proceedings of BIW 2008, Tahoe City, CA, p. 251-252

10. I. Pinayev, **Evaluation of pinhole camera resolution for NSLS-II storage ring**, Proceedings of BIW 2008, Tahoe City, CA, p. 270-273

11. N. Tsoupas, L. Ahrens, P. Pile, P. Thieberger, M.M. Murray, **Beam transport of 4 GeV protons from AGS to the 'proton interrogation target' of the 'neutrino line' ('Z_lin') and effect of the air on the transported beam**, Internal Technical Note C-A/AP/326, October 2008

12. S. Belomestnykh, et al., **CW rf systems of the Cornell ERL injector,** *Proceedings of the XXIV Linear Accelerator Conference,* Victoria, BC, Canada, September 29 – October 3, 2008, pp. 857-859 http://accelconf.web.cern.ch/AccelConf/LINAC08/papers/thp034.pdf

13. S. Belomestnykh, V. Shemelin, **Multipactor in minimum electric field regions of transmission lines and superconducting rf cavities,** *Proceedings of the XXIV Linear Accelerator Conference,* Victoria, BC, Canada, September 29 – October 3, 2008, pp. 860-862 http://accelconf.web.cern.ch/AccelConf/LINAC08/papers/thp035.pdf

14. B. Dunham, …, S. Belomestnykh, et al., **First tests of the Cornell University ERL injector,** *Proceedings of the XXIV Linear Accelerator Conference,* Victoria, BC, Canada, September 29 – October 3, 2008, pp. 699-703, http://accelconf.web.cern.ch/AccelConf/LINAC08/papers/we104.pdf

15. R. Connolly, J. Alessi, S. Bellavia, C. Dawson, C. Degen, W. Meng, D. Raparia, T. Russo, N. Tsoupas, **Laser-based profile and energy monitor for H- Beams**, Proceedings of the XXIV Linear Acelerator Conference, Victoria, BC, Canada, September 29-October 3, 2008

16. D. Kayran, D. Beavis, I. Ben-Zvi, M. Blaskiewicz, J.M. Brennan, A. Burrill, R. Calaga, P. Cameron, X. Chang, A. Drees, G. Ganetis, D. Gassner, J. Grimes, H. Hahn, L. Hammons, A. Hershcovitch, H-C. Hseuh, A. Jain, R. Lambiase, D. Lederle, V.N. Litvinenko, G. Mahler, G. McIntyre, W. Meng, T. Nehring, B. Oerter, C-I. Pai, D. Pate, D. Phillips, E. Pozdeyev, J. Reich, T. Roser, T. Russo, A. Sharma, Z. Segalov, J. Smedley, K. Smith, T. Rao, J. Tuozzolo, G. Wang, D. Weiss, N. Williams, Q. Wu, K. Yip, A. Zaltsman, et. al., **Status of high current R&D energy recovery linac at Brookhaven National Laboratory**, Proceedings of the XXIV Linear Accelerator Conference, Victoria, BC, Canada, September 29-October 3, 2008, p. 453 http://accelconf.web.cern.ch/AccelConf/LINAC08/papers/tup028.pdf

17. E. Pozdeyev, D. Kayran, V. Litvinenko, **Cathode ion bombardment in rf photoguns**, BNL Internal Technical Note C-A/AP/322, September 5, 2008 http://www.cadops.bnl.gov/AP/ap_notes/ap_note_322.pdf

18. V.N. Litvinenko, I. Ben Zvi, M. Blaskiewicz, Y. Hao, D. Kayran, E. Pozdeyev, G. Wang, G. Bell, D. Bruhwiler, A. Sobol, O.A. Shevchenko, N.A. Vinokurov, Y.S. Derbenev, S. Reiche, **Progress with FEL-based coherent electron cooling**, Proceedings of FEL08, Gyeongju, Korea, August 24-29, 2008, p. 529-532 http://accelconf.web.cern.ch/accelconf/FEL2008/papers/thdau05.pdf

19. V.N. Litvinenko, I. Ben Zvi, Y. Hao, D. Kayran, E. Pozdeyev, G. Wang, S. Reiche, O.A. Shevchenko, N.A. Vinokurov, **High gain FEL amplification of charge modulation caused by a hadron**, Proceedings of FEL08, Gyeongju, Korea, August 24-29, 2008, p. 51-54 http://accelconf.web.cern.ch/accelconf/FEL2008/papers/mopph026.pdf

20. I. Ben-Zvi, R. Calaga, R. Assmann, O. Bruning, O. Brunner, E. Ciapala, U. Dorda, R. Garoby, J.P. Koutchouk, T. Linnecar, R. Tomas, J. Tuckmantel, Y. Sun, F. Zimmerman, T. Peterson, N. Solyak, V. Yakovlev, K. Hosayama, N. Kota, A. Morita, Y. Morita, K. Oide, A. Seryi, Z. Li, L. Xiao, G. Burt, B. Hall, P.A. McIntosh, **LHC crab cavities**, Proceedings CARE 2008 Workshop

21. A.V. Fedotov, I. Ben-Zvi, X. Chang, D. Kayran, V.N. Litvinenko, E. Pozdeyev, T. Satogata, **Beam dynamics limits for low-energy RHIC operation**, 42nd ICFA Advanced Beam Dynamics Workshop on High-Intensity, High-Brightness Hadron Beams, HB2008, Nashville, TN, August 25-29, 2008, p. 75-77, http://accelconf.web.cern.ch/accelconf/HB2008/papers/wga10.pdf

22. V. Litvinenko, D. Beavis, I. Ben-Zvi, M. Blaskiewicz, A. Burrill, R. Calaga, P. Cameron, X. Chang, A. Drees, G. Ganetis, D.M. Gassner, H. Hahn, L.R. Hammons, A. Hershcovitch, H-C. Hseuh, A.K. Jain, D. Kayran, J. Kewisch, R.F. Lambiase, D.L. Lederle, G.J. Mahler, G.T. McIntyre, W. Meng, T.C. Nehring, B. Oerter, C. Pai, D. Pate, D. Phillips, E. Pozdeyev, T. Rao, J. Reich, T. Roser, T. Russo, K. Smith, J.E. Tuozzolo, D. Weiss, N. Williams, K. Yip, A. Zaltsman, H. Bluem, M.D. Cole, A.J. Favale, D. Holmes, J. Rathke, T. Schultheiss, J.R. Delayen, L.W. Funk, H.L. Phillips, J.P. Preble, **R&D energy recovery linac at Brookhaven National Laboratory**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 193 http://accelconf.web.cern.ch/AccelConf/e08/papers/mopc057.pdf

23. D. Trbojevic, S. Peggs, R. deMaria, Y. Papaphilippou, **Lattice without transition energy for the future PS2**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 370 http://accelconf.web.cern.ch/AccelConf/e08/papers/mopc129.pdf

24. W. Fischer, M. Blaskiewicz, I. Blackler, P. Cameron, C. Montag, T. Roser, V. Ptitsyn, **Analysis of intensity instability threshold at transition in RHIC**, 11th Biennial European Particle Accelerator Conference, EPAC08, Genoa, Italy, June 23-27, 2008, p. 1616-1618, http://cern.ch/AccelConf/e08/papers/wepp011.pdf

25. D. Trbojevic, S.A. Bogacz, R.P. Johnson, M. Popovic, **Flexible momentum compaction return arcs for RLAs**, 11th Biennian European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 2578 http://accelconf.web.cern.ch/AccelConf/e08/papers/wepp028.pdf

26. V.N. Litvinenko, Y. Derbenev, **FEL-based coherent electron cooling for high-energy hadron colliders**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

http://accelconf.web.cern.ch/AccelConf/e08/papers/weppo16.pdf

27. I. Pinayev, R. Alforque, A. Blednykh, P. Cameron, V. Ravindranath, S. Sharma, O. Singh, **Research and development program on beam position monitors for NSLS-II project**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 1245-1247

28. M.G. Fedurin, I. Pinayev, **Coupling correction in NSLS-II X-ray ring**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 3290-3291

29. I. Pinayev, **Integrated global orbit feedback with slow and fast correctors**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 3292-3294

30. I. Pinayev, M.G. Fedurin, **On the optimal number of eigenvectors for orbit correction**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 3295-3297

31. G. Hoffstaetter, …, S. Belomestnykh, et al., **Challenges for beams in an ERL extension to CESR,** *Proceedings of the 11th European Particle Accelerator Conference*, Genoa, Italy, June 23-27, 2008, pp. 190-192
http://accelconf.web.cern.ch/AccelConf/e08/papers/mopc056.pdf

32. S. Belomestnykh, et al., **Commissioning of the Cornell ERL injector rf systems,** *Proceedings of the 11th European Particle Accelerator Conference*, Genoa, Italy, June 23-27, 2008, pp. 832-834
http://accelconf.web.cern.ch/AccelConf/e08/papers/mopp116.pdf

33. S. Belomestnykh, et al., **First test of the Cornell single-cavity horizontal cryomodule,** *Proceedings of the 11th European Particle Accelerator Conference*, Genoa, Italy, June 23-27, 2008, pp. 835-837
http://accelconf.web.cern.ch/AccelConf/e08/papers/mopp117.pdf

34. E. Chojnacki, S. Belomestnykh, et al., **Design and fabrication of the Cornell ERL injector cryomodule,** *Proceedings of the 11th European Particle Accelerator Conference*, Genoa, Italy, June 23-27, 2008, pp. 844-846
http://accelconf.web.cern.ch/AccelConf/e08/papers/mopp123.pdf

35. M. Liepe, S. Belomestnykh, et al., **First test results from the Cornell ERL injector cryomodule,** *Proceedings of the 11th European Particle Accelerator Conference*, Genoa, Italy, June 23-27, 2008, pp. 883-885
http://accelconf.web.cern.ch/AccelConf/e08/papers/mopp138.pdf

36. D.L. Bruhwiler, A. Sobol, I. Ben-Zvi, V. Litvinenko, Y. Derbenev, **VORPAL simulations relevant to coherent electron cooling**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008
http://accelconf.web.cern.ch/AccelConf/e08/papers/thpc085.pdf

37. V. Ranjbar, K. Paul, D.T. Abell, I. Ben-Zvi, J. Kewisch, R.D. Ryne, J. Qiang, **Impact of magnet misalignment in an ERL for electron cooling in RHIC**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

38. N. Tsoupas, D. Kayran, V. Litvinenko, W.W. MacKay, **Uncoupled achromatic tilted s-bend**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 2548 http://accelconf.web.cern.ch/AccelConf/e08/papers/thpc042.pdf

39. N. Tsoupas, L. Ahrens, J.W. Glenn, W.W. MacKay, T. Satogata, **R-matrices of the fast beam extraction line of AGS**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

40. T. Shaftan, J. Rose, R. Heese, N. Tsoupas, Y. Li, W. Guo, D. Hseuh, E.D. Johnson, R. Meier, I. Pinayev, A. Blednykh, S. Krinsky, J. Skaritka, F.J. Willeke, G. Ganetis, S. Ozaki, S. Sharma, M. Rehak, O. Singh, **Status of the NSLS-II injection system design**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 2198-3300

41. W. Fischer, L. Ahrens, K. Brown, C. Gardner, W. Glenn, K. Unger, H. Huang, M. Mapes, J. Morris, V. Schoefer, L. Smart, P. Thieberger, N. Tsoupas, S.Y. Zhang, K. Zeno, **Injection and acceleration of Au31+ in the BNL AGS**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

42. C. Montag, N. Abreu, L. Ahrens, M. Bai, D. Barton, A. Bazilevsky, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, G. Bunce, R. Calaga, P. Cameron, R. Connolly, T. D'Ottavio, A. Drees, A.V. Fedotov, W. Fischer, G. Ganetis, C. J. Gardner, J. W. Glenn, T. Hayes, H. Huang, P. Ingrassia, D.A. Kayran, J. Kewisch, R.C. Lee, V.N. Litvinenko, A.U. Luccio, Y. Luo, W.W. MacKay, Y. Makdisi, N. Malitsky, G. Marr, A. Marusic, R. Michnoff, J. Morris, B. Oerter, H. Okada, F. Pilat, P. Pile, G. Robert-Demolaize, T. Roser, T. Russo, T. Satogata, C. Schultheiss, M. Sivertz, K. Smith, S. Tepikian, D. Trbojevic, N. Tsoupas, J. Tuozzolo, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, **RHIC polarized proton performance in Run-8**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008 http://www.agsrhichome.bnl.gov/RHIC/Runs/RhicRun8pp.pdf

43. V. Litvinenko, Y. Luo, V. Ptitsyn, T. Satogata, S. Tepikian, M. Bai, D. Bruno, P. Cameron, R. Connolly, A. Penna, A. Drees, A. Fedotov, G. Ganetis, L. Hoff, W. Louie, N. Malitsky, G. Marr, A. Marusic, C. Montag, F. Pilat, T. Roser, D. Trbojevic, N.Tsoupas, **Experience with IBS-suppression lattice in RHIC**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 2557-2559 http://accelconf.web.cern.ch/AccelConf/e08/papers/wepp015.pdf

44. C.J. Gardner, N.P. Abreu, L. Ahrens, J. Alessi, M. Bai, D. Barton, J. Beebe-Wang, M. Blaskiewicz, J.M. Brennan, K.A. Brown, D. Bruno, J. Butler, P. Cameron, C. Carlson, R. Connolly, A. Della Penna, T. D'Ottavio, A. Drees, W. Fischer, W. Fu, G. Ganetis, J.W. Glenn, M. Harvey, T. Hayes, H. Huang, P. Ingrassia, J. Kewich, R.C. Lee, V. Litvinenko, Y. Luo, W.W. MacKay, M. Mapes, G. Marr, A. Marusic, R. Michnoff, C. Montag, J. Morris, B. Oerter, F. Pilat, E. Pozdeyev, V. Ptitsyn, G. Robert-Demolaize, T. Roser, T. Russo, P. Sampson, J. Sandberg, T. Satogata, C. Schultheiss, F. Severino, K. Smith, D. Steski, S. Tepikian, Y. Than, P. Thieberger, D. Trbojevic, N. Tsoupas, J. Tuozzolo, A. Zaltsman, K.L. Zeno, S.Y. Zhang, **Setup and performance of RHIC for the 2008 run with deuteron-gold collisions**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008, p. 2548-2550 http://cern.ch/Accel/Conf/e08/papers/wepp011.pdf

45. H. Huang, L. Ahrens, M. Bai, K.A. Brown, C. Gardner, J.W. Glenn, F. Lin, A.U. Luccio, W.W. MacKay, T. Roser, S. Tepikian, N. Tsoupas, K. Yip, A. Zelenski, K. Zeno, **AGS polarized proton operation in run 8**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

46. R. Calaga, et. al., **Crab compensation for LHC beams**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

47. R. Calaga, et. al., **Localizing sources of horizontal orbit oscillations at RHIC**, 11th Biennial European Particle Accelerator Conference, EPAC, Genoa, Italy, June 23-27, 2008

48. V.N. Litvinenko, **Coherent electron cooling for LHC**, LARP Meeting, Port Jefferson, NY, 2008 larpdocs.fnal.gov/LARP/DocDB/0007/000756/001/Litvinenko_CM10_LARP_2008.pdf

49. I. Ben-Zvi, R. Calaga, F. Zimmermann, **Summary of the mini BNL/LARP/CARE-HHH workshop on crab cavities for the LHC,** Internal Technical Note C-A/AP/308, May 2008

50. Y. Semertzidis, D. Anastassopoulos, V. Anastassopoulos, D. Babusci, M. Bai, G. Bennett, J. Bengtsson, I. Ben-Zvi, M. Blaskiewicz, K. Brown, G. Cantatore, M. Dabaghyan, V. Dzhordzhadze, P.D. Eversheim, M.E. Emirhan, G. Fanourakis, A. Facco, A. Fedotov, A. Ferrari, T. Geralis, Y. Giomataris, F. Gonnella, F. Gray, R. Gupta, S. Haciomeroglu, G. Hoffstaetter, H. Huang, M. Incagli, K. Jungmann, M. Karuza, D. Kawall, B. Khazin, I.B. Khriplovich, I.A. Koop, Y. Kuno, D.M. Lazarus, R. Larsen, P. Levi Sandri, F. Lin, A. Luccio, N. Malitsky, W.W. MacKay, W. Marciano, A. Masaharu, W. Meng, R. Messi, L. Miceli, J.P. Miller, D. Moricciani, W.M. Morse, C.J.G. Onderwater, Y.F. Orlov, C.S. Ozben, T. Papaevangelou, V. Ptitsyn, B. Parker, D. Raparia, S. Redin, S. Rescia, G. Ruoso, T. Russo, A. Sato, Yu. Shatunov, V. Shemelin, A. Sidorin, A. Silenko, M. da Silva, N. Simos, E.J. Stephenson, G. Venanzoni, A. Vradis, G. Zavattini, A. Zelenski, K. Zioutas,

Search of deuteron EDM using frozen spin method, EDM collaboration report, BNL, April 2008

51. A. Fedotov, I. Ben-Zvi, X. Chang, D. Kayran, V. Litvinenko, E., Pozdeyev, T. Satogata, **Feasibility of electron cooling for low-energy RHIC operation**, BNL Internal Technical Note C-A/AP/307, April 2008 http://www.cadops.bnl.gov/AP/ap_notes/ap_note_307.pdf

52. J. Kewisch, I. Ben-Zvi, T. Rao, A. Burrill, D. Pate, R. Grover, R. Todd, H. Bluem, D. Holmes, T. Schultheiss, **The polarized SRF gun experiment**, AIP Conf. Proc. – February 6, 2008 – Volume 980, p. 118-123

53. N. Tsoupas, W.W. MacKay, T. Satogata, W. Glenn, L. Ahrens, K. Brown, C. Gardner, S. Tanaka, **R_transport_matrices of the Fast Extraction Beam (FEB) of the AGS, and beam parameters at the starting point of the AtR line**, Internal Technical Note C-A/AP/300, January 2008

2007

1. J. Smedley, I. Ben-Zvi, J. Bohon, X. Chang, R. Grover. A. Isakovic, T. Rao, Q. Wu, **Diamond amplified photocathodes**, Materials Research Society Fall Meeting, 26-30 November (2007), Boston, MA http://www.bnl.gov/cad/ecooling/docs/PDF/diamond_MRS_2007.pdf

2. W. Fischer, V. Ptitsyn, **Optimization bunch patterns for d-Au in RHIC Run-8**, Internal Technical Note C-A/AP/295, November 2007

3. D. Holmes, H. Bluem, B. Abel, A. Favale, E. Peterson, J. Rathke, T. Schultheiss, A. Todd, J. Kewisch, I. Ben-Zvi, A. Burrill, R. Grover, D. Pate, T. Rao, R. Todd, **Superconducting rf photocathode gun for low emittance polarized electron beams**, 13th International Workshop of RF Superconductivity, Beijing, China, October 14-19, 2007

4. V. Veshcherevich, S. Belomestnykh, et al., **High power tests of input couplers for Cornell ERL injector.** *Proceedings of the 13th Workshop on RF Superconductivity,* Peking University, Beijing, China, October 14-19, 2007, pp. 517-519, http://accelconf.web.cern.ch/AccelConf/srf2007/PAPERS/WEP26.pdf

5. M. Liepe, S. Belomestnykh, et al., **Status of the Cornell ERL injector cryomodule,** *Proceedings of the 13th Workshop on RF Superconductivity,* Peking University, Beijing, China, October 2007, pp. 9-13 http://accelconf.web.cern.ch/AccelConf/srf2007/PAPERS/MO202.pdf

6. P. McIntosh, …, S. Belomestnykh, et al., **Realization of a prototype superconducting CW cavity and cryomodule for energy recovery,** *Proceedings of the 13th Workshop on RF Superconductivity,* Peking University, Beijing, China, October 2007, pp. 545-548

http://accelconf.web.cern.ch/AccelConf/srf2007/PAPERS/WEP33.pdf

7. W. Xu, et. al., **Design of the compact high average current dc-sc photoinjector at PKU**, Proc. of the 13th Workshop on RF Superconductivity, Beijing, China, October 2007

8. W. Xu, et. al., **Fabrication studies on multi-cell TESLA-type cavity**, Proc. of the 13th Workshop on RF Superconductivity, Beijing, China, October 2007

9. A.V. Fedotov, I. Ben-Zvi, X. Chang, D. Kayran, T. Satogata, **Electron cooling simulations for low-energy RHIC operations**, Proceedings COOL'07 Workshop, Bad Kreuznach, Germany, September 10-14, 2007, p. 243-246, PRM2C06

10. D.L. Bruhwiler, G.I. Bell, A.V. Sobol, I. Ben-Zvi, A.V. Fedotov, V. Litvinenko, **Status of VORPAL friction force simulations for the RHIC II cooler**, Proceedings COOL'07 Workshop, Bad Kreuznach, Germany, September 10-14, 2007

11. A. Fedotov, **Progress of high-energy cooling for RHIC**, Proceedings COOL'07 Workshop, Bad Kreuznach, Germany, September 10-14, 2007

12. A. Shemayakin, L. Prost, A. Fedotov, A. Sidorin, **Electron cooling in the recycler cooler**, Proceedings COOL'07 Workshop, Bad Kreuznach, Germany, September 10-14, 2007

13. A. Sidorin, A. Smirnov, A.V. Fedotov, I. Ben-Zvi, D. Kayran, **Electron cooling simulation for arbitrary distribution of electrons**, Proceedings COOL'07 Workshop, Bad Kreuznach, Germany, September 10-14, 2007

14. J. Kewisch, I. Ben-Zvi, T. Rao, A. Burrill, D. Pate, R. Grover, R. Todd, H. Bluem, D. Holmes, T. Schultheiss, **The polarized SRF gun experiment**, Proceedings PST2007, XIIth International Workshop on Polarized Sources, Targets & Polarimetry, Brookhaven National Laboratory, September 10-14, 2007

15. V. Litvinenko, Y. Derbenev, **Free electron lasers and high-energy electron cooling**, C-AD Internal Technical Note C-A/AP/290, September 2007

16. T. Satogata, L. Ahrens, M. Bai, J. Brennan, D. Bruno, J. Butler, A. Drees, A. Fedotov, W. Fischer, M. Harvey, T. Hayes, W. Jappe, R. Lee, W. MacKay, N. Malitsky, G. Marr, R. Michnoff, B. Oerter, E. Pozdeyev, T. Roser, F. Severino, K. Smith, S. Tepikian, N. Tsoupas, **RHIC low-energy challenges and plans**, Proceedings of Science, Italy, September 2007

17. Y. Hao, L.H. Yu, **Preliminary study of quiet start method HGHG FEL simulation**, 29th International Free-Electron Laser Conference, Budker INP, Novosibirsk, Russia, August 26-31, 2007, p. 264
http://accelconf.web.cern.ch/accelconf/p07/PAPERS/TUPPH020.pdf

18. I. Ben-Zvi, A. Burrill, R. Calaga, X. Chang, R. Grover, R. Gupta, H. Hahn, L. Hammons, D. Kayran, J. Kewisch, R. Lambiase, V.N. Litvinenko, G. McIntyre, D. Naik, D. Pate, D. Phillips, E. Pozdeyev, T. Rao, J. Smedley, R. Than, R.J. Todd, D. Weiss, Q. Wu, A. Zaltsman (BNL, Upton, LI, NY), M. Cole, M. Falletta, D. Holmes, J. Rathke, T. Schultheiss, R. Wong (AES, Medford, NY), A. Murray, M. Todd (AES, Princeton, NJ), **Superconducting photoinjector**. 29th International Free-Electron Laser Conference, Budker INP, Novosibirsk, Russia, August 26-31, 2007, p. 290
http://accelconf.web.cern.ch/accelconf/f07/PAPERS/WEAAU04.PDF

19. D. Kayran, I. Ben-Zvi, V.N. Litvinenko, E. Pozdeyev, et. al., **FEL potential of the high current ERLs at BNL**, 29th International Free-Electron Laser Conference, Budker INP, Novosibirsk, Russia, August 27-31, 2007, p. 232-235
http://accelconf.web.cern.ch/accelconf/f07/PAPERS/TUPPH006.PDF

20. D. Trbojevic, **Non-scaling FFAG accelerators and gantries for medical purposes**, ICFA, Beam Dynamics Newsletter, No. 43, August 2007

21. A.G. Ruggiero, J. Alessi, E. Beebe, A. Pikin, T. Roser, D. Trbojevic, **FFAG-based accelerator for radio-isotopes production**, Internal Technical Note C-A/AP/279, July 2007

22. G. Wang, M. Blaskiewicz, **Simulations of RHIC coherent stabilities due to wakefield and electron cooling**, Proceedings of the 22nd Particle Accelertor Conference, PAC07, Albuquerque, NM, June 25-29, 2007, p. 3726-3628

23. R. Calaga, et. al., **Small angle crab compensation for LHC IR upgrade**, Proceedings of the 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007

24. R. Calaga, et. al., **BPM calibration independent LHC optics correction**, Proceedings of the 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007

25. W. Fischer, R. Calaga, **Experiments with a DC wire in RHIC**, Proceedings of the 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007

26. W. Fischer, M. Blaskiewicz, R. Calaga, P. Cameron, Y. Luo, T. Pieloni, **Transverse beam transfer functions of colliding beams in RHIC**, Proceedings of the 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007

27. P. Quigley, S. Belomestnykh, et al., **Instrumentation for the Cornell ERL injector test cryostats**, *Proceedings of the 2007 Particle Accelerator Conference,* Albuquerque, NM, June 25-29, 2007, p. 527-529
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/MOPAS043.pdf

28. D. Trbojevic, et. al., **Heavy ion driver with the non-scaline FFAG**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque, NM, June 25-29, 2007
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/TUPAS104.pdf

29. I. Pinayev, **Characterization of the rf system of the NSLS X-ray ring**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 661-663

30. Y. Hao, L.H. Yu, **Quiet start method in HGHG FEL simulation**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 1200-1202
http://accelconf.web.cern.ch/accelconf/p07/PAPERS/TUPMS005.pdf

31. I. Pinayev, J. Rose, T.V. Shaftan, L-H. Yu, **Injection simulations for NSLS-II storage ring**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 1350-1352

32. J. Rose, I. Pinayev, T.V. Shaftan, **Design considerations of the NSLS-II injection Linac**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 1359-1361

33. Y. Hao, V. Litvinenko, C. Montag, E. Pozdeyev, V. Ptitsyn, **Study of electron-proton beam-beam interactions in eRHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, pp. 1865-1867
http://accelconf.web.cern.ch/accelconf/p07/PAPERS/TUPAS097.pdf

34. M. Bai, P. Cameron, A. Luccio, H. Huang, V. Ptitsyn, T. Roser, S. Tepikian, **Snake depolarizing resonance study in RHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque, NM, June 25-29, 2007, p. 1850-1852, http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/TUPAS086.PDF

35. S. Belomestnykh, et al., **Deflecting cavity for beam diagnostics in ERL injector**, *Proceedings of the 2007 Particle Accelerator Conference,* Albuquerque, NM, June 25-29, 2007, pp. 2331-2333
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/WEPMS004.pdf

36. V. Veshcherevich, S. Belomestnykh, et al., **High power tests of first input couplers for Cornell ERL injector cavities**. *Proceedings of the 2007 Particle Accelerator Conference,* Albuquerque, NM, June 25-29, 2007, pp. 2355-2357, http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/WEPMS013.pdf

37. M. Liepe, S. Belomestnykh, et al., **The Cornell ERL superconducting 2-cell injector cavity string and test cryomodule**, *Proceedings of the 2007 Particle Accelerator Conference,* Albuquerque, NM, June 25-29, 2007, pp. 2572-2574, http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THOAKI02.pdf

38. A. Fedotov, **RHIC plans towards higher luminosity**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007

39. H. Hahn, L.R. Hammons, D. Naik, **Ferrite-lined HOM absorber for the e-Cool ERL**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3705

40. E. Pozdeyev, I. Ben-Zvi, P. Cameron, K. A. Drees, D. M. Gassner, D. Kayran, V. Litvinenko, G. J. Mahler, T. Rao, **Diagnostics of BNL ERL**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 4387
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/FRPMS116.PDF

41. V.H. Ranjbar, D.T. Abell, K. Paul Tech-X, Boulder, Colorado I. Ben-Zvi, J. Kewisch BNL, Upton, LI, NY, J. Qiang, R.D. Ryne, LBNL, Berkeley, CA, **High-order modeling of an ERL for electron cooling in the RHIC luminosity upgrade using MaryLie/IMPACT**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 4000

42. E. Pozdeyev, I. Ben-Zvi, A.V. Fedotov, D. Kayran, V. Litvinenko, G. Wang, **Collective effects in the RHIC-II electron cooler**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3717
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPAS100.PDF

43. D. Kayran, V. Litvinenko, **Merger system optimization in BNL's high current R&D ERL**, Proceedings of 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007, p. 3711
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPAS097.PDF

44. D. Kayran, I. Ben-Zvi, R. Calaga, X. Chang, J. Kewisch, V. Litvinenko, E. Pozdeyev, **Optics of a two-pass ERL as an electron source for a non-magnetized RHIC-II electron cooler**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3708
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPAS096.PDF

45. A.V. Fedotov, I. Ben-Zvi, D. Kayran, E. Pozdeyev BNL, Upton, LI, NY, A.O. Sidorin, A.V. Smirnov JINR, Dubna, Moscow Region, **High-energy electron cooling based on realistic six-dimensional distribution of electrons**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3699

46. A.V. Fedotov, I. Ben-Zvi, D. Kayran, V. Litvinenko, E. Pozdeyev BNL, Upton, LI, NY, G.I. Bell, D.L. Bruhwiler, A.V. Sobol Tech-X, Boulder, CO, A.O. Sidorin, A.V. Smirnov JINR, Dubna, Moscow Region, **Electron cooling in the presence of undulator fields**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3696
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPAS092.PDF

47. D. Dimitrov, D. L. Bruhwiler, R. Busby, J.R. Cary Tech-X, Boulder, CO, I. Ben-Zvi, X. Chang, T. Rao, J. Smedley, Q. Wu BNL, Upton, LI, NY, **3D simulations of secondary electron generation and transport in a diamond amplifier for photocathodes**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3555
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPAS020.PDF

48. G. I. Bell, D. L. Bruhwiler, A. V. Sobol Tech-X, Boulder, Colorado, I. Ben-Zvi, A. V. Fedotov, V. Litvinenko BNL, Upton, LI, NY, **Numerical algorithms for modeling electron cooling in the presence of external fields**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3549
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPAS017.PDF

49. D. Trbojevic, I. Ben-Zvi, J.S. Berg, M. Blaskiewicz, V. Litvinenko, W.W. MacKay, V. Ptitsyn, T. Roser, A.G. Ruggiero, **Acceleration of electrons with the racetrack non-scaling FFAG for e-RHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3205
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPMS094.PDF

50. D. Trbojevic, et. al., **Muon acceleration with the racetrack FFAG**, Proceedings of 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007, http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THMS093.PDF

51. D. Trbojevic, et. al., **Superconducting non-scaling FFAG gantry for carbon/proton cancer therapy**, Proceedings of 22nd Paricle Accelertor Conference, PAC'07, Albuquerque, NM, June 25-29, 2007
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/RHMS092.PDF

52. S.Y. Zhang, V. Ptitsyn, **Proton beam emittance growth at RHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007, p. 1886-1888
http://cern.ch/AccelConf/p07/PAPERS/TUPAS107.PDF

53. X. Chang, I. Ben-Zvi, J. Kewisch, C. Pai, **High average current low emittance beam employing CW normal conducting gun**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 2547, http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/WEPMS090.PDF

54. J. Kewisch, X. Chang, **Emittance compensation for magnetized beams**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3190
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPMS088.PDF

55. J. Kewisch, X. Chang, **Low emittance electron beams for the RHIC electron cooler**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 3187-3189

http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/THPMS087.PDF

56. A. Burrill, I. Ben-Zvi BNL, Upton, LI, NY, M.D. Cole, J. Rathke AES, Princeton, NJ, P. Kneisel, R. Manus, R.A. Rimmer, Jefferson Lab, Newport News, VA, **Multipacting analysis of a quarter wave choke joint used for insertion of a demountable cathode into a SRF photoinjector**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 2544

57. A. Burrill, I. Ben-Zvi, R. Calaga, H. Hahn, V. Litvinenko, G.T. McIntyre BNL, Upton, LI, NY, P. Kneisel, J. Mammosser, J.P. Preble, C.E. Reece, R.A. Rimmer, J. Saunders, Jefferson Lab, Newport News, VA, **Challenges encountered during the processing of the BNL ERL 5 cell accelerating cavity**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p 2541
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/WEPMS088.PDF

58. Q.S. Shu, G. Cheng, I.M. Phipps, J.T. Susta AMAC, Newport News, VA, I. Ben-Zvi, BNL, Upton, LI, NY, P. Kneisel, G. Myneni Jefferson Lab, Newport News, VA, J. Mast, R. Selim CNU, Newport News, **SQUID-based nondestructive testing instrument of dished niobium sheets for SRF cavities**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 2469

59. I. Ben-Zvi, J. Alduino, D.S. Barton, D. Beavis, M. Blaskiewicz, J.M. Brennan, A. Burrill, R. Calaga, P. Cameron, X. Chang, K.A. Drees, A.V. Fedotov, W. Fischer, G. Ganetis, D.M. Gassner, J.G. Grimes, H. Hahn, L.R. Hammons, A. Hershcovitch, H.-C. Hseuh, D. Kayran, J. Kewisch, R.F. Lambiase, D.L. Lederle, V. Litvinenko, C. Longo, W.W. MacKay, G.J. Mahler, G.T. McIntyre, W. Meng, B. Oerter, C. Pai, G. Parzen, D. Pate, D. Phillips, S.R. Plate, E. Pozdeyev, T. Rao, J. Reich, T. Roser, A.G. Ruggiero, T. Russo, C. Schultheiss, Z. Segalov, J. Smedley, K. Smith, T. Tallerico, S. Tepikian, R. Than, R.J. Todd, D. Trbojevic, J. E. Tuozzolo, P. Wanderer, G. Wang, D. Weiss, Q. Wu, K. Yip, A. Zaltsman BNL, Upton, LI, NY, D.T. Abell, G.I. Bell, D.L. Bruhwiler, R. Busby, J.R. Cary, D.A. Dimitrov, P. Messmer, V.H. Ranjbar, D.S. Smithe, A.V. Sobol, P. Stoltz Tech-X, Boulder, CO, V. Aleksandrov, D.L. Douglas, Y.W. Kang ORNL, Oak Ridge, TN, H. Bluem, M.D. Cole, A.J. Favale, D. Holmes, J. Rathke, T. Schultheiss, J.J. Sredniawski, A. M.M. Todd, AES, Princeton, NJ, A.V. Burov, S. Nagaitsev, L.R. Prost Fermilab, Batavia, IL, Y.S. Derbenev, P. Kneisel, J. Mammosser, H.L. Phillips, J.P. Preble, C.E. Reece, R.A. Rimmer, J. Saunders, M. Stirbet, H. Wang Jefferson Lab, Newport News, VA, V.V. Parkhomchuk, V.B. Reva BINP SB RAS, Novosibirsk A.O. Sidorin, A.V. Smirnov, JINR, Dubna, Moscow Region, **Status of the R&D towards electron cooling of RHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 1938
http://cern.ch/AccelConf/p07/PAPERS/WEOCK103.PDF

60. Y. Hao, V. Litvinenko, C. Montag, E. Pozdeyev, V. Ptitsyn, **Studies of electron-prton beam-beam interactions in eRHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque, NM, June 25-29, 2007, p. 1865

http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/TUPAS097.PDF

61. V. Litvinenko, J. Alduino, D. Beavis, I. Ben-Zvi, M. Blaskiewicz, J. M. Brennan, A. Burrill, R. Calaga, P. Cameron, X. Chang, K. A. Drees, G. Ganetis, D. M. Gassner, J.G. Grimes, H. Hahn, L. R. Hammons, A. Hershcovitch, H.-C. Hseuh, A.K. Jain, D. Kayran, J. Kewisch, R.F. Lambiase, D.L. Lederle, C. Longo, G.J. Mahler, G.T. McIntyre, W. Meng, T.C. Nehring, B. Oerter, C. Pai, D. Pate, D. Phillips, E. Pozdeyev, T. Rao, J. Reich, T. Roser, T. Russo, Z. Segalov, J. Smedley, K. Smith, J.E. Tuozzolo, G. Wang, D. Weiss, N. Williams, Q. Wu, K. Yip, A. Zaltsman, BNL, Upton, LI, NY, H. Bluem, M.D. Cole, A.J. Favale, D. Holmes, J. Rathke, T. Schultheiss, A. M.M. Todd, AES, Princeton, NJ, B.W. Buckley, Ithaca, G. Citver, Stony Brook University, Stony Brook, **Status of R&D energy recovery linac at Brookhaven National Laboratory**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 1347, http://cern.ch/AccelConf/p07/PAPERS/TUPMS076.PDF

62. Q. Wu, I. Ben-Zvi, A. Burrill, X. Chang, D. Kayran, T. Rao, J. Smedley, BNL, Upton, LI, NY, **Thermal emittance measurement design for diamond secondary emission**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 1374 http://accelconf.web.cern.ch/accelconf/p07/PAPERS/TUPMS089.PDF

63. T. Shaftan, J. Rose, I. Pinayev, R. Heese, J. Bengtsson, J. Skaritka, W. Meng, S. Ozaki, R. Meier, C. Stelmach, V. Litvinenko, S. Pjerov, S. Sharma, G. Ganetis, H.C. Hseuh, E.D. Johnson, N. Tsoupas, W. Guo, J. Beebe-Wang, A.U. Luccio, L.H. Yu, D. Raparia, D. Wang, **Conceptual design of the NSLS-II injection system**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007, p. 1362-1364 http://cern.ch/AccelConf/p07/PAPERS/TUPMS083.PDF

64. N. Tsoupas, L. Ahrens, R. Alforque, M. Bai, K. Brown, E. Courant, J. Glenn, H. Huang, A. Jain, W.W. MacKay, M. Okamura, T. Roser, S. Tepikian, **Design of a thin quadrupole to be used in the AGS synchrotron**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007

65. F. Lin, S.Y. Lee, L.A. Ahrens, M. Bai, K.A. Brown, E.D. Courant, J.W. Glenn, A.U. Luccio, W.W. MacKay, T. Roser, N. Tsoupas, **Investigation of residual vertical intrinsic resonances with dual partial Siberian snakes in the AGS**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007

66. T. Satogata, L. Ahrens, M. Bai, J.M. Brennan, D. Bruno, J. Butler, A. Drees, A. Fedotov, W. Fischer, M. Harvey, T. Hayes, W. Jappe, R.C. Lee, W.W. MacKay, N. Malitsky, G. Marr, R. Michnoff, B. Oerter, E. Pozdeyev, T. Roser, F. Severino, K. Smith, S. Tepikian, N. Tsoupas, **RHIC challenges for low energy operation**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007

67. M. Bai, L. Ahrens, I.G. Alekseev, J. Alessi, J. Beebe-Wang, M. Blaskiewicz, A. Bravar, J.M. Brennan, K. Brown, D. Bruno, G. Bunce, J. Butler, P. Cameron, R. Connolly, J. Delong, T. D'Ottavio, A. Drees, W. Fischer, G. Ganetis, C. Gardner, J. Glenn, T. Hayes, H-C. Hseuh, H. Huang, P. Ingrassia, J. Laster, R. Lee, A. Luccio, Y. Luo, W.W. MacKay, Y. Makdisi, G. Marr, A. Marusic, G. McIntyre, R. Michnoff, C. Montag, J. Morris, P. Oddo, B. Oerter, J. Piacentino, F. Pilat, V. Ptitsyn, T. Roser, T. Satogata, K. Smith, D.N. Svirida, D. Trbojevic, N. Tsoupas, J. Tuozzolo, M. Wilinski, S. Tepikian, A. Zaltsman, A. Zelenski, K. Zeno, S.Y. Zhang, **Accelerating polarized protons to 250 GeV**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007, p. 745-747, http://cern.ch/AccelConf/p07/PAPERS/TUODKI04.pdf

68. L. Ahrens, J. Alessi, J. Benjamin, M. Blaskiewicz, J.M. Brennan, K.A. Brown, C. Carlson, W. Fischer, C.J. Gardner, J.W. Glenn, M. Harvey, T. Hayes, H. Huang, G. Marr, J. Morris, F. Pilat, T. Roser, F. Severino, K.S. Smith, D. Steski, P. Thieberger, N. Tsoupas, A. Zaltsman, **Setup and performance of the RHIC injector accelerators for the 2007 run with gold ions**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007

69. N. Tsoupas, T. Shaftan, J. Rose, I. Pinayev, R. Heese, R. Meier, C. Stelmach, **Design of beam transfer lines for the NSLS II**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007, p. 664-666

70. N. Tsoupas, L. Ahrens, K. Brown, I-H. Chiang, C.J. Gardner, W.W. MacKay, P. Pile, A. Rusek, **Uniform beam distributions at the target of the NSRL beam transfer line**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007

71. W. Fischer, M. Blaskiewicz, J.M. Brennan, H. Huang, H.C. Hseuh, V. Ptitsyn, T. Roser, P. Thieberger, D. Trbojevic, U. Iriso, J. Wei, S.Y. Zhang, **Electron cloud observations and cures in the RHIC**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007, p. 759-761 http://cern.ch/AccelConf/p07/PAPERS/TUXAB02.PDF

72. A. Drees, L. Ahrens, J. Alessi, M. Bai, D. Barton, J. Beebe-Wang, M. Blaskiewicz, K. Brown, M. Brennan, D. Bruno, J. Butler, R. Calaga, P. Cameron, R. Connolly, T. D'Ottavio, W. Fischer, W. Fu, G. Ganetis, J.W. Glenn, M. Harvey, T. Hayes, H.C. Hseuh, H. Huang, J. Kewisch, R.C. Lee, V. Litvinenko, Y. Luo, W.W. MacKay, G. Marr, A. Marusic, R. Michnoff, C. Montag, J. Morris, B. Oerter, F. Pilat, V. Ptitsyn, T. Roser, J. Sandberg, T. Satogata, C. Schultheiss, F. Severino, K. Smith, S. Tepikian, D. Trbojevic, N. Tsoupas, J. Tuozzolo, A. Zaltsman, S.Y. Zhang, **Summary of the RHIC performance during the FY07 heavy ion run**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007, p. 722-724 http://cern.ch/AccelConf/p07/PAPERS/TUOCKI02.PDF

73. A. Sobol, G. Bell, D. Bruhwiler, A. Fedotov, **Quantifying reduction of the friction force due to magnetic imperfections**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-27, 2007, presentation only

74. D. Bruhwiler, G. Bell, P. Messmer, A. Fedotov, **Scaling VORPAL electron cooling simulations to larger number of processors**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, presentation only

75. D. Bruhwiler, G. Bell, A. Sobol, P. Messmer, P. Stoltz, J. Cary, A. Fedotov, I. Ben-Zvi, R. Li, Y. Zhang, S. Derbenev, L. Merminga, J. Qiang, R. Ryne, W. Mori, V. Decyk, **Parallel simulations of electron cooling**, Proceedings of SciDAC Conference, Boston, MA, June 2007

76. Y. Luo, A. Jain, W. Fischer, S. Tepikian, D. Trbojevic, **Modeling RHIC linear chromaticity with sextupole components in the arc main dipoles**, Internal Technical Note C-A/AP/276, May 2007

77. T. Rao, I. Abdel, I. Ben-Zvi, X. Chang, J. Grimes, R. Grover, J. Smedley, R. Todd, J. Warren, Q. Wu, J. Bohon, D. Fischer, D. Dimitrov, **Status of diamond secondary emission enhanced photocathode**, Proceedings 41st Advanced ICFA Beam Dynamics Workshop on Energy Recovery Linacs (ERL'07), Daresbury, UK, May 21-25, 2007, http://www.erl07.dl.ac.uk/

78. W. Fischer, M. Blaskiewicz, J.M. Brennan, H. Huang, H.C. Hseuh, V. Ptitsyn, T. Roser, P. Thieberger, D. Trbojevic, J. Wei, S.Y. Zhang, **Electron cloud observations and cures in the RHIC**, Proc. ECLOUD International Workshop on Electron-Cloud Effects, Daegu, Korea, April 9-12, 2007 http://www.osti.gov/bridge/servlets/purl/913088-JhuqYe/

79. P. Thieberger, R. Bonati, C. Montag, D. Trbojevic, **Damping vs. clamping to mitigate the RHIC triplet oscillations**, Internal Technical Note C-A/AP/273, April 2007

80. G. Bell, D. Bruhwiler, A. Sobol, A. Fedotov, I. Be-Zvi, V. Litvinenko, **Parallel n-body algorithms for charged particles in external fields**, Presentation at April 2007 APS meeting

81. J. Cary, P. Spentzouris, J. Aumndoson, L. McInnes, M. Borland, B. Mustapha, B. Norris, P. Ostroumov, Y. Wang, W. Fischer, I. Ben-Zvi, R. Ryne, E.C. Geddes, J. Qiang, E. Ng, S. Li, C. Ng, R. Lee, L. Merminga, H. Wang, D. Bruhwiler, D. Dechow, P. Mullowney, P. Messmer, C. Nieter, S. Ovtchinnikov, K. Paul, P. Stoltz, D. Wade-Stein, W. Mori, V. Decyk, C.K. Huang, W, Lu, M. Tzoufras, F. Tsung, M. Zhou, G. Werner, T. Antonsen, T. Katsouleas, **The community petascale project for accelerator science and simulations**, Journal of Physics: Conference Series 78, 012009 (2007)

82. Y. Luo, M. Bai, J. Bengtssn, W. Fischer, D. Trbojevic, **Simulation of 3Qx resonance driving term measurement with ac dipole excitation**, Internal Technical Note C-A/AP/265, January 2007

83. Y. Luo, J. Bengtsson, W. Fischer, D. Trbojevic, **Simulation of proposed on-line third order resonance correction schemes**, Internal Technical Note C-A/AP/264, January 2007

84. Y. Luo, W. Fischer, S. Tepikian, D. Trbojevic, **Online nonlinear chromaticity correction using off-momentum tune response matrix**, Internal Technical Note C-A/AP/263, January 2007

85. V. Shemelin, S. Belomestnykh, **RF design of the deflecting cavity for beam diagnostics in ERL injector,** Report ERL 07-2, Laboratory for Elementary-Particle Physics, Cornell University (2007) http://www.lns.cornell.edu/public/ERL/2007/ERL07-2/ERL07-2.pdf

86. W. Xu, e. al., **Study on large grain size Nb cavity** (in Chinese), Proc. of the 3rd Workshop on Accelerator Technology, Hangzhou, China, 2007

87. J. Beebe-Wang, I. Ben-Zvi, A. Fedotov, W. Fischer, Y. Hao, D. Kayran, V.N. Litvinenko, W.W. MacKay, C. Montag, E. Pozdeyev, V. Ptitsyn, T. Roser, D. Trbojevic, et. al., **eRHIC accelerator position paper** http://www.bnl.gov/cad/eRHIC/Documents/AD_Position_Paper_2007.pdf

3. Invited talks

2011

1. A. Fedotov, **Intra-Beam Scattering and its Application to ERL**, *50th Advanced Beam Dynamics Workshop on Energy Recovery Linacs ERL2011,* Tsukuba, Japan, October 16-21, 2011

2. S. Belomestnykh, **Status of BNL SRF guns,** *50th Advanced Beam Dynamics Workshop on Energy Recovery Linacs ERL2011,* Tsukuba, Japan, October 16-21, 2011

3. S. Belomestnykh, **Superconducting RF for ERLs of eRHIC & recent progress at R&D ERL**, *50th Advanced Beam Dynamics Workshop on Energy Recovery Linacs ERL2011,* Tsukuba, Japan, October 16-21, 2011

4. S. Belomestnykh, W. Xu, **Development of antenna-type HOM couplers at BNL**, *50th Advanced Beam Dynamics Workshop on Energy Recovery Linacs ERL2011,* Tsukuba, Japan, October 16-21, 2011

5. S. Belomestnykh, W. Xu, **Fundamental power couplers for the ERL prototype SRF gun at BNL**, *50th Advanced Beam Dynamics Workshop on Energy Recovery Linacs ERL2011,* Tsukuba, Japan, October 16-21, 2011

6. N. Tsoupas, presentation on the **APS DNP meeting** at Michigan State University, East Lansing, MI, October 16-19, 2011

7. V. Litvinenko, **ERL in high energy and nuclear physics**, International Energy Recovery Linac Workshop, Tsukuba, Japan, October 15, 2011

8. V. Litvinenko, **Coherent synchrotron radiation shielding experiment at ATF, Beam Dynamics Group**, International Energy Recovery Linac Workshop, October 15, 2011

9. W. Xu, **High power test and multipacting simulation of fundamental power coupler for BNL SRF gun**, 2011 Code Workshop, California, October 10-14, 2011

10. D. Trbojevic, **Non-scaling FFAG permanent magnet cancer therapy accelerator**, Fixed Field Alternating Gradient Accelerator Workshop, FFAG'11, Trinity College, Oxford, UK, September 11-16, 2011

11. D. Trbojevic, **Non scaling fixed field alternating gradient gantries**, Fixed Field Alternating Gradient Accelerator Workshop, FFAG'11, Trinity College, Oxford, UK, September 11-16, 2011

12. D. Trbojevic, **Non scaling field alternating gradient permanent magnet cancer therapy**, Proc. 2nd International Particle Accelerator Conference (IPAC 2011), San Sebastian, Spain, September 4-9, 2011 http://accelconf.web.cern.ch/AccelConf/IPAC2011/papers/weoba03.pdf

13. V. Litvinenko, **Electron-ion colliders in the USA**, Transversity 2011, 3rd International Workshop on Transverse Polarization Phenomena in Hard Scattering, Veli Losinj, Croatia, September 1, 2011

14. V. Litvinenko, **eRHIC – high-energy high-luminosity electron-hadron collider**, APS DPF Meeting, Brown University, Providence, Rhode Island, August 10, 2011

15. I. Ben-Zvi, **Quarter Wave Resonators for beta~1 Accelerators**, 15th International Conference on RF Superconductivity, Chicago IL July 25-29, 2011

16. S. Belomestnykh, **Survey of SRF guns**, *Proceedings of the 15th International Conference on RF Superconductivity*, Chicago, IL, July 25-29, 2011

17. N. Tsoupas, invited to CPOTS International School in the University of Crete for summer of 2011. Delivered a series of lectures on the subject of **Charged Particles Beam Optics**

18. V. Ptitsyn, **Possibilities for maintaining AA and pp capabilities in parallel with eRHIC**, Plenary session on RHIC and AGS Users' Meeting, Brookhaven National Laboratory, June 24, 2011

19. V. Litvinenko, **eRHIC design and R&D**, RHIC & AGS Users' Meeting, Brookhaven National Laboratory, June 22, 2011

20. D. Trbojevic, **eRHIC IR design**, RHIC & AGS Users' Meeting, Brookhaven National Laboratory, June 21-22, 2011

21. W. Xu, **Input couplers for superconducting cavities: superconducting cavity related phenomena: field emission, multipacting, ponderomotives effects**, Lectures for course: Superconducting RF for High-β Accelerators, US Particle Accelerator School, June 20-24, 2011

22. D. Trbojevic, **Non-scaling fixed field alternating gradient gantries**, 2nd Workshop on Hadron Beam Therapy of Cancer, Erice, Sicily, Italy, May 20-27, 2011

23. V. Litvinenko, D. Trbojevic, **Electron-ion collider at eRHIC**, EIC Detector R&D Meeting, Physics Department, Brookhaven National Laboratory, May 9, 2011

24. W. Xu, **Fundamental power coupler for superconducting cavities**, Lectures for Mechanical Engineers at Brookhaven National Laboratory, Aprl 28, 2011

25. V. Litvinenko, **High-energy high-luminosity electron-ion collider at eRHIC**, DIS'11 Workshop, Newport News, VA, April 12, 2011

26. V. Litvinenko, **Progress in eRHIC design and development**, Electron-Ion Collider Advisory Committee Meeting, Thomas Jefferson National Accelerator Facility, April 10, 2011

27. V. Litvinenko, **Accelerator R&D towards high-energy high-luminosity eRHIC**, Office of Science LDRD Review, April 6, 2011

28. W. Xu, **High current cavity design at BNL**, 2011 Particle Accelerator Conference, New York, March 28-April 1, 2011

29. V. Litvinenko, **Accelerator science for the 21st century**, Colloquium at SLAC National Accelerator Laboratory, February 22, 2011

30. V. Ptitsyn, **eRHIC – future electron-ion collider at BNL**, Seminar talk at Stony Brook University, Stony Brook, February 22, 2011

31. S. Belomestnykh, **Experience with B-cell cavities in CESR.** *Workshop on the Operation of CESR Design 500 MHz Cavities*, Diamond Light Source, UK, January 26-27, 2011 http://diamond.ac.uk/dms/Events/Pdfs/S-Belomestnykh-Experience-with-B-cell-cavities-in-CESR/S_Belomestnykh_Experience_with_B_cell_cavities_in_CESR.pdf

2010

1. V. Ptitsyn, **Spin response formalism and spin matching**, Seminar talk at Jefferson Laboratory, Newport News, VA, November 23, 2010

2. V. Litvinenko, **ERL-based LHeC. BNL's Version**, 3rd LHeC Workshop, Chavannes-de-bogis, Switzerland, November 12, 2010

3. W. Xu, **New HOM coupler design for high current superconducting cavity**, International Workshop on HOM Damping Superconductive RF Cavities, Cornell University, October 11-13, 2010

4. A. Fedotov, M. Blaskiewicz, W.Fischer, T. Satogata, S. Tepikian, **Interplay of space-charge and beam-beam effects in a collider**, Proc. of HB2010 Workshop, Morschach, Switzerland, September 27-October 1, 2010

5. V. Ptitsyn, **Beam-beam simulations for future electron-ion collider eRHIC**, ICFA Workshop on High Intensity High Brightness Hadron Beams, Morschach, Switzerland, September 29, 2010

6. V. Ptitsyn, Y. Hao, V.N. Litvinenko, **Beam-beam simulations for future electron-ion collider eRHIC**, Proceedings of HB2010 Workshop, Morschach, Switzerland, September 27-October 1, 2010, p. 516-520 http://accelconf.web.cern.ch/AccelConf/hb2010/papers/weo2c01.pdf

7. D. Trbojevic, **Non scaling fixed field alternating gradient accelerators and their applications**, ICFA Advanced Beam Dynamics Workshop, HB2010, Morschach, Switzerland, September 27-October 1, 2010, WEO0B04 http://accelconf.web.cern.ch/AccelConf/hb2010/papers/weo0b04.pdf

8. D. Trbojevic, **Non-scaling FFAG and their applications**, 46th ICFA Advanced Beam Dynamics Workshop on High-Intensity and High-Brightness Hadron Beams, HB2010, Morschach, Switzerland, p. 482, WEO2B04 http://accelconf.web.cern.ch/AccelConf/hb2010/papers/weo2b04.pdf

9. V. Ptitsyn, **eRHIC accelerator design**, Workshop on Perturbative and Non-Perturbative Aspects of QCD at Collider Energies, Seattle, September 13, 2010

10. N. Tsoupas, **Uniform beam distributions of charged particle beams**, Invited talk at the CAARI 2010 21st Conference in Application of Accelerators in Research and Industry, Fort Worth, TX, August 8-13, 2010, AIP Conf. Proc. 1336, Application of Accelerators in Research and Industry

11. V. Litvinenko, **Coherent electron cooling**, Special Beams Physics Sympoisum, Thomas Jefferson National Accelerator Facility, Newport News, VA, August 2, 2010

12. D. Trbojevic, **IR and arc design of the eRHIC**, Electron-Ion Collider Collaboration Meeting, Washington, DC, The Catholic University of America, July 29-31, 2010

13. V. Litvinenko, **Coherent electron cooling**, Electron-Ion Collaboration Meeting, Washington, DC, The Catholic University of America, July 29, 2010

14. X. Chang, **Emission of the diamond amplifier cathode**, 2010 DIAMP Workshop, Boulder, CO, June 14-16, 2010

15. V.Litvinenko, **eRHIC – high luminosity electron-ion collider at BNL**, RHIC & AGS Users' Meeting, Brookhaven National Laboratory, June 8, 2010

16. V. Litvinenko, **Electron-hadron colliders**, 1st International Particle Accelerator Conference (IPAC'10), Kyoto, Japan, May 26, 2010

17. V. Ptitsyn, **EIC accelerator design**, Workshop on Electron-Nucleus Collider Physics, New York, May 14, 2010

18. N. Tsoupas, presentation on the **Topical Electron Ion Collaboration** EIC meeting at Michigan State University in May 2010

19. S. Belomestnykh, **CW rf systems at Cornell University: status and operational experience,** *2010 Workshop on High Power RF (CWRF10),* Barcelona, Spain, May 2010 http://indico.cern.ch/getFile.py/access?contribId=9&sessionId=1&resId=1&materialId=slides&confId=73280

20. V. Litvinenko, **Coherent electron cooling**, Accelerator Seminar, CASA/TJNAF, Newport News, VA, April 29, 2010

21. V. Litvinenko, **eRHIC – high luminosity electron-ion collider at BNL**, Triangle Universities Nuclear Laboratory Seminar, Duke University, Durham, NC, April 27, 2010

22. V. Litvinenko, **News from eRHIC and advanced cooling schemes for high energy hadron beams**, Accelerator Physics Forum, CERN, Switzerland, April 9, 2010

23. V. Ptitsyn, **Challenges in accelerating and colliding polarized beams**, 455th Brookhaven Lecture, Brookhaven National Laboratory, February 17, 2010

24. V. Litvinenko, **eRHIC and MeRHIC**, Electron Ion Collider Meeting, Stony Brook University, Stony Brook, NY, January 11, 2010

25. D. Trbojevic, **eRHIC and MeRHIC lattice and interaction regions**, Electron Ion Collider Collaboration Meeting, Stony Brook University, Stony Brook, January 10-12, 2010

2009

1. V. Litvinenko, **EIC – Machine design progress and options at BNL**, EICAC Meeting, Thomas Jefferson Accelerator Laboratory, Newport News, VA, November 2, 2009

2. V. Ptitsyn, **EIC accelerator design**, Physics at a High Energy Electron Ion Collider, INT Workshop, Seattle, WA, October 19, 2009

3. V. Litvinenko, **Accelerator designs and the needed technological challenges for the future EIC**, ENC/EIC Workshop, 8th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, Milos Island, Greece, October 2, 2009

4. V. Litvinenko, **Developments with eRHIC**, 2nd CERN-ECFA-NuPECC Workshop on the LHeC, Esplanade du Lac, Divonne, France, September 1-3, 2009

5. V. Litvinenko, **LHeC with ~100% energy recovery linac**, 2nd CERN-ECFA-NuPECC Workshop on the LHeC, Esplanade du Lac, Divonne, France, September 1-3, 2009

6. V. Ptitsyn, **RHIC polarization studies at 250 GeV**, RHIC Polarimeter Workshop, Brookhaven National Laboratory, July 31, 2009

7. V. Litvinenko, **Future Electron-hadron colliders: eRHIC and LHeC**, The 2009 Europhysics Conference on High Energy Physics, Krakow, Poland, July 16-22, 2009

8. V. Litvinenko, **Advances and challenges in cooling intense high-energy hadron beams**, Invited Lecture, Laser and Plasma Accelerators Workshop 2009, Kardamili, Greece, June 25, 2009

9. V. Litvinenko, **The electron-ion collider**, Common ENC/EIC Workshop, GSI, Darmstadt, Germany, May 28, 2009

10. V. Ptitsyn, **Beam-beam effects in RHIC and MeRHIC**, Common ENC/EIC Workshop, GSI, Darmstadt, Germany, May 28, 2009

11. V. Litvinenko, **Designs for electron-ion collider**, XVII International Workshop on Deep-Inelastic Scattering and Related Subjects, DIS2009, Madrid, April 28, 2009

12. S. Belomestnykh, **LLRF development at Cornell,** *2009 Low-Level Radio frequency Workshop*, Tsukuba, Japan, October 2009 http://kds.kek.jp/getFile.py/access?contribId=1&sessionId=0&resId=0&materialId=slides&confId=3937

13. D. Trbojevic, **Isocentric gantries for proton/carbon therapy based on FFAG's**, International Workshop on FFAG's, Fermilab, Batavia, IL, September 21-25, 2009

14. D. Trbojevic, **Crossing resonances in the non-scaling FFAG**, International Workshop on FFAG's, Fermilab, Batavia, IL, September 21-25, 2009

15. A. Fedotov, I. Ben-Zvi, X. Chang, D. Kayran, V.N. Litvinenko, A. Pendzick, T. Satogata, **Electron cooling for low-energy RHIC**, Workshop on Beam Cooling and Related Topics (COOL09), Lanzhou, China, August 31 – September 4, 2009

16. D. Trbojevic, **Fixed field alternating gradient (FFAG) accelerators and their applications**, Brookhaven National Laboratory, invited talk at the Brookhaven Accelerator Forum, September 2009

17. S. Belomestnykh, **Tutorial on operational aspects of superconducting rf cavities with beam,** *14th International Conference on RF Superconductivity,* Berlin, Germany, September 2009

http://accelconf.web.cern.ch/AccelConf/srf2009/CONTENTS/Tutorials/s_belomestnykh_operational_aspects_of_superconducting_cavities_with_beam.pdf

18. A. Fedotov, **Luminosity Improvement of Low-Energy RHIC with Cooling**, 5th International Workshop on Critical Point and Onset of Deconfinement (CPOD 2009), Upton, NY, June 8-12, 2009

19. S. Belomestnykh, **Cornell ERL injector status,** *45th ICFA Beam Dynamics Workshop ERL09: Energy Recovery Linacs*, Ithaca, NY, June 2009 http://accelconf.web.cern.ch/AccelConf/ERL2009/talks/wg304_talk.pdf

20. D. Trbojevic, **Lattice and interaction region design of the RHIC medium ion electron collider**, ENC/EIC Workshop at Darmstadt, May 28-30, 2009

21. X. Chang, I. Ben-Zvi, A. Burrill, J. Kewisch, E.M. Muller, T. Rao, J. Smedley, E. Wang, Y.C. Wang, Q. Wu, **First observation of an electron beam emitted from a diamond amplified cathode**, Proceedings of the 23rd Particle Accelerator Conference 4 – 8 May 2009, Vancouver, British Columbia, Canada, pp. 691-693 http://trshare.triumf.ca/~pac09proc/Proceedings/papers/tu2grc03.pdf

22. D. Trbojevic, **Innovative gantry design with non-scaling FFAG**, Workshop on Hadron Therapy of Cancer, Erice, April 24-May 1, 2009

23. V. Litvinenko, **Coherent electron cooling**, Laboratory for Nuclear Science, Massachusetts Institute of Technology, Boston, MA, February 10, 2009

24. V.N. Litvinenko, T. Hemmick, **The Center for Accelerator Science and Education (CASE)**, Brookhaven Accelerator Forum, Brookhaven National Laboratory, January 14, 2009

2008

1. V. Ptitsyn, **Orbit-related issues of spin tune control in RHIC**, RHIC Spin Collaboration Meeting, Brookhaven National Laboratory, December 16, 2008

2. V. Litvinenko, **Staging of eRHIC**, Electron-Ion Collider Collaboration Meeting, Lawrence Berkeley National Laboratory, Berkeley, CA, December 14, 2008

3. V. Ptitsyn, **eRHIC and MEeIC parameters and layouts**, EIC Workshop, Berkeley, CA, December 11-13, 2008

4. D. Trbojevic, **FFAG-type multi-pass arcs for RLA's**, Muon Collider Design Workshop, December 8-12, 2008, Jefferson Lab, Newport News, VA

5. V. Litvinenko, **Center for Accelerator Science and Education**, Colloquium, Department of Physics and Astronomy, Stony Brook University, October 14, 2008

6. V. Ptitsyn, **Polarized beams at EICs**, Proc. 18th International Spin Physics Symposium, University of VA, Charlottesville, VA, October 6-11, 2008, AIP Conf. Proc. Vol. 1149, p. 735-640 http://scitation.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=APCPCS001149000001000735000001&idtype=cvips&gifs=yes

7. B.W.J. McNeil, N. Thompson, D.J. Dunning, B. Sheehy, **Retention of attosecond pulse structure in an HHG seeded FEL amplifier**, Proceedings of the 30th International Free Electron Laser Conference, Gyeongju, Korea, 2008

8. V. Litvinenko, **ERL-based electron-hadron colliders: From eRHIC to LHeC**, 1st ECFA and CERN LHeC Workshop, Divonne-les-Baines, France, September 2, 2008

9. D. Trbojevic, **Muon acceleration by RLA using non-scaling FFAG**, FFAG'08 Workshop in Manchester, UK, September 1-5, 2008

10. D. Trbojevic, **Small proton therapy accelerator by non-scaling FFAG**, FFAG'08 Workshop in Manchester, UK, September 1-5, 2008

11. D. Trbojevic, **Electron acceleration in RLA in e-RHIC using non-scaling FFAG's**, FFAG'08 Workshop in Manchester, UK, September 2, 2008

12. S. Belomestnykh, **RF systems for CW SRF linacs,** *XXIV Linear Accelerator Conference (LINAC08),* Victoria, Canada, September 2008 http://accelconf.web.cern.ch/AccelConf/LINAC08/talks/we201_talk.pdf

13. A. Fedotov, M. Bai, D. Bruno, P. Cameron, R. Connolly, J. Cupolo, A. Della Penna, A. Drees, W. Fischer, G. Ganetis, L. Hoff, V.N. Litvinenko, W. Louie, N. Malitsky, G. Marr, A. Marusic, C. Montag, V. Ptitsyn, T. Roser, T. Satogata, S. Tepikian, D. Trbojevic, N. Tsoupas, **IBS suppression lattice in RHIC: Theory and Experimental Verification**, Proc. of HB2008 Workshop, Nashville, TN, August 25-29, 2008, p. 148 http://accelconf.web.cern.ch/AccelConf/HB2008/papers/wga28.pdf

14. V. Ptitsyn, J. Beebe-Wang, I. Ben-Zvi, A. Fedotov, W. Fischer, Y. Hao, D. Kayran, V.N. Litvinenko, W.W. MacKay, C. Montag, E. Pozdeyev, T. Roser, D. Trbojevic, N. Tsoupas, **eRHIC conceptual design**, 42nd ICFA Advanced Beam Dynamics Workshop on High-Intensity, High-Brightness Hadron Beams, HB2008, Nashville, TN, August 25-29, 2008, p. 388-391 http://accelconf.web.cern.ch/AccelConf/HB2008/papers/wge01.pdf

15. V. Ptitsyn, N. Abreu, J.M. Brennan, M. Blaskiewicz, W. Fischer, C. Montag, R. Lee, S. Tepikian, **Crossing transition at RHIC**, 42nd ICFA Advanced Beam

Dynamics Workshop on High-Intensity, High-Brightness Hadron Beams, HB2008, Nashville, TN, August 25-29, 2008, p. 53-57 http://accelconf.web.cern.ch/AccelConf/HB2008/papers/wge04.pdf

16. V. Litvinenko, **eRHIC – ERL – based electron-hadron collider**, Brookhaven Accelerator Forum, Brookhaven National Laboratory, July 23, 2008

17. D. Trbojevic, **Luminescence beam profile monitor at the RHIC**, Instrumentation Meeting, July 25, 2008

18. V. Ptitsyn, **eRHIC design status**, RHIC Future: New Physics through Upgrades Workshop, Brookhaven National Laboratory, May 27, 2008

19. V. Ptitsyn, **Status of eRHIC design**, 4th Electron-Ion Collider Workshop, Hampton, VA, May 19, 2008

20. V. Litvinenko, **Coherent electron cooling**, EIC Collaboration Meeting, Hampton University, May 19-23, 2008

21. V. Litvinenko, **Novel features in eRHIC**, EIC Collaboration Meeting, Hampton University, May 20, 2008

22. D. Trbojevic, **e-RHIC with non-scaling FFAG's**, talk presented at Electron Ion Collider meeting in Hampton, VA, May 19, 2008

23. D. Trbojevic, **Lattice design of the medium electron energy collider**, EIC Collaboration Meeting, Hampton University, May 19-23, 2008

24. D. Trbojevic, **RLA for muon collider with non-scaling FFAG's**, talk at the Low Emittance Muon Collider Workshop, FNAL, April 21-25, 2008

25. V. Litvinenko, **Coherent electron cooling**, AB Seminar, CERN, Geneva, Switzerland, March 13, 2008

26. V. Litvinenko, **Potential of ERL-based electron-hadron collider: from eRHIC to LHeC**, Accelerator Physics Forum, CERN, Geneva, Switzerland, March 11, 2008

27. D. Trbojevic, **Emittance measurements by the fluorescence monitor**, RHIC weekly meeting, March 4, 2008

28. V. Litvinenko, **Graduate course**, US Particle Accelerator School, Santa Rosa, CA, January 25, 2008

29. D. Trbojevic, **Report from experiment: Au77+ in RHIC**, Accelerator Physics Experiments, January 23, 2008, February 8, 2008, and May 25, 2008

2007

1. V. Litvinenko, **Coherent electron cooling**, Electron-Ion Collider Collaboration Meeting, Stony Brook University, December 7, 2007

2. D. Trbojevic, **Medium energy electron ion collider lattice design**, Electron-Ion Collider Collaboration Meeting, Stony Brook University, December 7-8, 2007

3. D. Trbojevic, **Report from the experiment Au+77 in RHIC**, APEX Workshop, Brookhaven National Laboratory, November 2, 2007

4. D. Trbojevic, **Luminescence beam profile monitor at the RHIC H-jet**, XIIth International Workshop on Polarized Sources, Targets & Polarimetry, October 15, 2007

5. I. Ben-Zvi, **Electron Cooling and Electron-Ion Colliders at BNL**, 13th International Workshop of RF Superconductivity, Beijing, China, October 14-19, 2007

6. S. Belomestnykh, **Superconducting rf in storage-ring-based light sources,** *Proceedings of the 13th Workshop on RF Superconductivity,* Peking University, Beijing, China, October 14-19, 2007, pp. 19-23
   http://accelconf.web.cern.ch/AccelConf/srf2007/PAPERS/MO302.pdf

7. S. Belomestnykh, **Overview of input power coupler developments, pulsed and CW,** *Proceedings of the 13th Workshop on RF Superconductivity,* Peking University, Beijing, China, October 14-19, 2007, pp. 419-423
   http://accelconf.web.cern.ch/AccelConf/srf2007/PAPERS/WE305.pdf

8. D. Trbojevic, **Innovative design of the isocentric proton/carbon ion gantries**, 18th International Conference on Cyclotrons and their Applications, Giardini Naxos, Italy, October 1-5, 2007, p. 207-212

9. A. Fedotov, **Progress of High-Energy Electron Cooling for RHIC**, COOL07, Bad Kreuznach, Germany, September 10-14, 2007

10. D. Trbojevic, **Crossing the transition in RHIC**, RHIC weekly meeting, August 21, 2007

11. V. Litvinenko, **Potential uses of ERL-based γ-ray sources**, Laser and Plasma Accelerators Workshop, Teceira Island, Azores, Portugal, July 9-13, 2007 (lightning round talk)

12. D. Trbojevic, **Higher luminosity IR for RHIC**, RHIC Retreat, July 2007

13. A. Fedotov, **RHIC Plans Towards a Higher Luminosity**, 22nd Particle Accelerator Conference, PAC07, Albuquerque, NM, June 25-29, 2007

14. V. Ptitsyn, **From HERA to future electron-ion colliders**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque, NM, June 25-27, 2007, p. 1927-1929
http://cern.ch/AccelConf/p07/PAPERS/WEZAKI02.PDF

15. X. Chang, I. Ben-Zvi, A. Burrill, J.G. Grimes, T. Rao, Z. Segalov, J. Smedley BNL, Upton, LI, NY, Q. Wu, **Recent progress on the diamond amplified photo-cathode experiment**, Proceedings of 22nd Particle Accelerator Conference, PAC'07, Albuquerque NM, June 25-29, 2007, p. 2044
http://accelconf.web.cern.ch/accelconf/p07/PAPERS/WEOCC04.PDF

15. S. Ozaki, J. Bengtsson, S.L. Kramer, S. Krinsky, V. Litvinenko, **Philosophy for NSLS II design with sub-nanometer horizontal emittance**, Proceedings of 2007 Particle Accelerator Conference, Albuquerque, NM, June 25-29, 2007, p. 77, http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/MOOAAB01.PDF

16. W. Meng, G. Ganetis, A.K. Jain, D. Kayran, V. Litvinenko, C. Longo, G.J.Mahler, E. Pozdeyev, J.E. Tuozzolo, **Unique features in magnet designs for R&D energy recovery linac at BNL**, Proceedings of 2007 Particle Accelerator Conference, Albuquerque, NM, June 25-29, 2007, p. 655
http://accelconf.web.cern.ch/AccelConf/p07/PAPERS/MOPAS097.PDF

17. V. Ptitsyn, **Collider aspects of the polarized beams at RHIC, RHIC-II, and eRHIC**, Workshop on the future of RHIC Spin and the Physics of eRHIC, Brookhaven National Laboratory, June 20, 2007

18. V. Ptitsyn, L. Ahrens, M. Bai, D.S. Barton, J. Beebe-Wang, M. Blaskiewicz, S. Bravar, K.A. Brown, J.M. Brennan, D. Bruno, G. Bunce, R. Calaga, P. Cameron, R. Connolly, J. DeLong, T. D'Ottavio, A. Drees, A. Fedotov, W. Fischer, G. Ganetis, H. Hahn, T. Hayes, H-C. Hseuh, H. Huang, P. Ingrassia, D. Kayran, J. Kewisch, R. Lee, V.N. Litvinenko, A.U. Luccio, Y. Luo, W.W. MacKay, Y. Makdisi, N. Malitsky, G. Marr, A. Marusic, R. Michnoff, C. Montag, J. Morris, A. Nicoletti, F. Pilat, P. Pile, T. Roser, T. Russo, J. Sandberg, T. Satogata, C. Schultheiss, S. Tepikian, D. Trbojevic, N. Tsoupas, J. Tuozzolo, A. Zaltsman, K. Zeno, A. Zelenski, S.Y. Zhang, **RHIC performance with polarized protons in run-6**, AIP Conf. Proc. June 13, 2007, Vol. 915, p 896-899, Proceedings of the 17th International Spin Physics Symposium

19. V. Litvinenko, **Optics issues for ERL-based electron cooler**, 41st Advanced ICFA Beam Dynamics Workshop on Energy Recovery Lincs, ERL07, Daresbury Laboratory, UK, May 21-25, 2007

20. V. Litvinenko, **ERLs in high energy and nuclear physics**, 41st Advanced ICFA Beam Dynamics Workshop on Energy Recovery Linacs, ERL07, Daresbury Laboratory, UK, May 21-25, 2007

21. D. Trbojevic, **Innovative design of the isocentric proton/carbon ion gantries**, Gantry Workshop, Vienna, Austria, March 9-10, 2007

22. I. Ben-Zvi, **Next Generation Electron-Ion Colliders**, Asian Particle Accelerator Conference APAC07, Indore, India, January 29 – February 2, 2007

23. S.L. Kramer, J. Bengtsson, S. Krinsky, V.N. Litvinenko, S. Ozaki, **NSLS-II design: a novel approach to light source design**, Proceedings of Asian Particle Accelerator Conference, APAC 2007, Indore, India, January 29-February 2, 2007
http://accelconf.web.cern.ch/AccelConf/a07/PAPERS/THC3MA03.PDF

24. V. Litvinenko, Rings: **Coherent phenomena: electron cloud**, 37th Winter Colloquium on Physics of Quantum Electronics, Snowbird, UT, January 6, 2007

25.

4. Memberships

a. Organizing committees.
b. Program Committees.
c. Working Group Leadership at a workshop.
d. Advisory Committee (National and or international)
e. Prize committees.
f. Reviewer status of papers (name journals), SBIR/STTR, DOE reviews

2007

1. Chair, Particle Accelerator Science and technology Committee, IEEE/NPSS
2. Member, National Academies Committee for the Scientific Assessment of High-power Free-electron Laser Technology.
3. Member, Fermilab Accelerator Advisory Committee
4. Member, Cockcroft Institute Science Advisory Committee
5. Member, University of Maryland UMER Science Advisory Committee
6. Member, DOE review of ILC Americas Regional Team
7. Member DOE review of LHC Accelerator Research Program
8. Member, International Executive Committee, FEL Conference
9. Member, Core Organizing Committee, Advanced Accelerator Concepts Workshop
10. Chair, IEEE/NPSS Particle Accelerator Science and Technology Prize
11. Member, International Organizing Committee, ERL Workshop
12. Member International Beam Cooling Workshop Organizing Committee
13. Member, International Advisory Committee, Laser-Beam Interactions and Laser-Plasma Accelerator Workshop
14. Member, International Organizing Committee, 2007 Asian Particle Accelerator Conference
15. Member, Technical Advisory Working Group, DOD High Energy Laser Program
16. Reviewer Physical Review Letters
17. Reviewer Physical Review Special Topics – Accelerators and Beams
18. Reviewer SBIR
19. Reviewer NSF proposals
20. Reviewer Grant applications for the DOE's SBIR/STTR (Ptitsyn)
21. Reviewer of Phase I and Phase II grant applications submitted under the DOP SBIR/STTR Program (Belomestnykh)
22. A. Fedotov led international collaboration on theory and simulations of high-energy cooling
23. A. Fedotov collaborated with FNAL on electron cooling studies: MoU signed
24. Referee for Phys. Rev. Letters and Phys. Rev. ST Accelerator Beams Journals (Fedotov)
25. Department of Physics and Astronomy, Stony Brook University (Litvinenko)
26. Accelerator Physics, Graduate Course (PHY 684) 2007 (Litvinenko)
27. Substitute lecture, E&M II, Graduate Course (PHY 506) Spring 2007 (Litvinenko)
28. Chair of FEL Prize Committee (Litvinenko)
29. Member, Fellowship Committee, APS Division of Physics of Beams (Litvinenko)
30. Chair of BNL Council (Litvinenko)

31. Chair, Accelerator Experiment Acceptance Committee, BNL, C-AD (Litvinenko)
32. Member, Muon Technical Advisory Committee (Litvinenko)
33. Member, DOE SBIR/STTR Phase I Review Committee (Litvinenko)
34. Member, DOE SIDAC-2 Review (Litvinenko)
35. Reviewer, DoE SBIR proposal (Litvinenko)
36. Reviewer, Physics Review and Physics Review Letters (Litvinenko)
37. Reviewer, Physics Review Special Topics – Accelerators and Beams (Litvinenko)
38. Reviewer, National Science Foundation (Litvinenko)
39. Reviewer, Department of Energy (Litvinenko)
40. Reviewer, IEEE, Journal of Quantum Electronics (Litvinenko)
41. Reviewer, Nuclear Instruments & Methods (Litvinenko)
42. Reviewer, Physical Review ST Accelerators & Beams (Hahn)
43.

2008

1. Chair, Particle Accelerator Science and technology Committee, IEEE/NPSS
2. Member, National Academies Committee for the Scientific Assessment of High-power Free-electron Laser Technology
3. Member, Fermilab Accelerator Advisory Committee
4. Member, Cockcroft Institute Science Advisory Committee
5. Co-Chair, LHC Crab Cavity mini-workshop, February 25-26, 2008
6. Member, Organizing Committee, International Particle Accelerator Conference
7. Member, International Executive Committee, FEL Conference
8. Member, Core Organizing Committee, Advanced Accelerator Concepts Workshop
9. Chair, Advanced Accelerator Concepts Prize Committee
10. Member, FEL Prize Committee
11. Chair, IEEE/NPSS Particle Accelerator Science and Technology Prize
12. Member, International Organizing Committee, ERL Workshop
13. Member International Beam Cooling Workshop Organizing Committee
14. Member, International Advisory Committee, Laser-Beam Interactions and Laser-Plasma Accelerator Workshop
15. Member, Technical Advisory Working Group, DOD High Energy Laser Program
16. Reviewer Physical Review Letters
17. Reviewer Physical Review Special Topics – Accelerators and Beams
18. Reviewer SBIR
19. Reviewer NSF proposals
20. Reviewer Grant applications for the DOE's SBIR/STTR (Ptitsyn)
21. Group on the Acceleration, Storage and Polarimetry of Polarized Beams at 18th International Symposium on Spin Physics, Charlottesville, October 6-11, 2008 (Ptitsyn)
22. Thesis: Gang Wang, Coherent electron coolingand two stream instabilities due to electron cooling, Stony Brook University, December 2008 (Litvinenko)
23. Reviewer of Phase I and Phase II grant applications submitted under the DOP SBIR/STTR Program (Belomestnykh)
24. Review Panel Member: 12 GeV Upgrade: Design Status and Safety Review for Cryomodules, Jefferson Lab, Newport News, VA, March 28, 2008 (Belomestnykh)

25. Member of International Program Committee for High-Brightness High-Intensity Hadron Beams (HB2011) Workshop, Nashville, TN, 2008 (Fedotov)
26. Granted tenure at BNL by BSA (Fedotov)
27. Referee for Phys. Rev. Letters and Phys. Rev. ST Accelerator Beams Journals (Fedotov)
28. Referee for Jordan Journal of Physics (Fedotov)
29. Department of Physics and Astronomy, Stony Brook University (Litvinenko)
30. Chair of FEL Prize Committee (Litvinenko)
31. Member, Particle Accelerator Conference Special University Standing Subcommittee (Litvinenko)
32. Member, Fellowship Committee, APS Division of Physics of Beams (Litvinenko)
33. Chair of BNL Council (Litvinenko)
34. Chair, Accelerator Experiment Acceptance Committee, BNL, C-AD (Litvinenko)
35. Member, Muon Technical Advisory Committee (Litvinenko)
36. Reviewer, DoE SBIR proposal (Litvinenko)
37. Reviewer, Physics Review and Physics Review Letters (Litvinenko)
38. Reviewer, Physics Review Special Topics – Accelerators and Beams (Litvinenko)
39. Reviewer, National Science Foundation (Litvinenko)
40. Reviewer, Department of Energy (Litvinenko)
41. Reviewer, IEEE, Journal of Quantum Electronics (Litvinenko)
42. Reviewer, Nuclear Instruments & Methods (Litvinenko)
43. Reviewer, Physical Review ST Accelerators & Beams (Hahn)
44.

2009

1. Chair, Particle Accelerator Science and technology Committee, IEEE/NPSS
2. Member, Fermilab Accelerator Advisory Committee
3. Member, Cockcroft Institute Science Advisory Committee
4. Member, Organizing Committee, International Particle Accelerator Conference
5. Member, International Executive Committee, FEL Conference
6. Member, Core Organizing Committee, Advanced Accelerator Concepts Workshop
7. Chair, Advanced Accelerator Concepts Prize Committee
8. Chair, FEL Prize Committee
9. Chair, IEEE/NPSS Particle Accelerator Science and Technology Prize
10. Chair, IEEE/NPSS Thesis Award Committee
11. Member, International Organizing Committee, ERL Workshop
12. Member International Beam Cooling Workshop Organizing Committee
13. Member, International Advisory Committee, Laser-Beam Interactions and Laser-Plasma Accelerator Workshop
14. Member, Technical Advisory Working Group, DOD High Energy Laser Program
15. Reviewer Physical Review Letters
16. Reviewer Physical Review Special Topics – Accelerators and Beams
17. Reviewer SBIR
18. Reviewer NSF proposals
19. Reviewer Grant applications for the DOE's SBIR/STTR (Ptitsyn)
20. Proposals for OFES-NNSA grants (Ptitsyn)

21. International Conference on RF Superconductivity: member of the International Program Committee (Belomestnykh)
22. Reviewer of Phase I and Phase II grant applications submitted under the DOP SBIR/STTR Program (Belomestnykh)
23. Review Panel Member: Review of the RHIC 56 MHz Superconducting Storage Cavity, BNL, Upton, NY January 8, 2009 (Belomestnykh)
24. Led design study for Low-Energy RHIC electron cooling (Fedotov)
25. MoU with FNAL on feasibility study of using Pelletron for low-energy RHIC (Fedotov)
26. Member of Machine Advisory Committee of NICA project (JINR, Dubna, Russia) (Fedotov)
27. Reviewer of DOE Office of High Energy Physics grant (Fedotov)
28. Referee for Phys. Rev. Letters and Phys. Rev. ST Accelerator Beams Journals (Fedotov)
29. Reviewed grants for the SBIR/STTR program (Sheehy)
30. Department of Physics and Astronomy, Stony Brook University (Litvinenko)
31. Chair of FEL Prize Committee (Litvinenko)
32. Member, Doctoral Research Awards Committee, American Physical Society, Division of Physics of Beams (Litvinenko)
33. Chair, FELs and Light Sources, International Program Committee, 2009 PAC (Litvinenko)
34. Panel member, Discovery Science, US DOE High Energy Physics Accelerators for America's Future Symposium and Workshop, October 2009 (Litvinenko)
35. Chair of EIC session, Common ENC/EIC Workshop, GSI, Germany, May 2009 (Litvinenko)
36. Member, Particle Accelerator Conference Special University Standing Subcommittee (Litvinenko)
37. Member, Fellowship Committee, APS Division of Physics of Beams (Litvinenko)
38. Chair of BNL Council (Litvinenko)
39. Chair, Accelerator Experiment Acceptance Committee, BNL, C-AD (Litvinenko)
40. Member, Muon Technical Advisory Committee (Litvinenko)
41. Reviewer, DoE SBIR proposal (Litvinenko)
42. Reviewer, Physics Review and Physics Review Letters (Litvinenko)
43. Reviewer, Physics Review Special Topics – Accelerators and Beams (Litvinenko)
44. Reviewer, National Science Foundation (Litvinenko)
45. Reviewer, Department of Energy (Litvinenko)
46. Reviewer, IEEE, Journal of Quantum Electronics (Litvinenko)
47. Reviewer, Nuclear Instruments & Methods (Litvinenko)
48. Reviewer, Physical Review ST Accelerators & Beams (Hahn)
49.

2010

1. Divisional Associate Editor for PRL.
2. Member, Fermilab Accelerator Advisory Committee
3. Member, Organizing Committee, International Particle Accelerator Conference
4. Member, International Executive Committee, FEL Conference

5. Member, Core Organizing Committee, Advanced Accelerator Concepts Workshop
6. Chair, Advanced Accelerator Concepts Prize Committee
7. Chair, FEL Prize Committee
8. Chair, IEEE/NPSS Particle Accelerator Science and Technology Prize
9. Chair, IEEE/NPSS Thesis Award Committee
10. Member, International Organizing Committee, ERL Workshop
11. Member International Beam Cooling Workshop Organizing Committee
12. Member, International Advisory Committee, Laser-Beam Interactions and Laser-Plasma Accelerator Workshop
13. Member, Technical Advisory Working Group, DOD High Energy Laser Program
14. Member, LHC Crab Cavity Advisory Board
15. Reviewer SBIR
16. Reviewer NSF proposals
17. Reviewer Grant applications for the DOE's SBIR/STTR (Ptitsyn)
18. Journal of Physics G: Nuclear and Particle Physics (Ptitsyn)
19. Group on EIC machine, IR design and development at EIC workshop, Stony Brook, January 10-12, 2010 (Ptitsyn)
20. International Conference on RF Superconductivity: member of the International Program Committee (Belomestnykh)
21. Reviewer of Phase I and Phase II grant applications submitted under the DOP SBIR/STTR Program (Belomestnykh)
22. Reviewer of DOE Office of Science Early Career Research Program Grant Proposals (Belomestnykh)
23. Review Panel Member: Review of the VECC/e-Linac Cryomodule Conceptual Design, Vancouver, Canada, September 24, 2010 (Belomestnykh)
24. Led the work on feasibility and design study for low-energy RHIC cooler (Fedotov)
25. Member of Machine Advisory Committee of NICA project (JINR, Dubna, Russia) (Fedotov)
26. pEDM Technical design report and review
27. Referee for Phys. Rev. Letters and Phys. Rev. ST Accelerator Beams Journals (Fedotov)
28. Reviewed grants for the SBIR/STTR program (Sheehy)
29. Department of Physics and Astronomy, Stony Brook University (Litvinenko)
30. Chair of FEL Prize Committee (Litvinenko)
31. Member, International Organizing Committee for 2010 International Particle Accelerator Conference, IPAC'11, San Sebastian, Spain (Litvinenko)
32. Member, Scientific Program Committee for 2010 International Particle Accelerator Conference, IPAC'10, Kyoto, Japan (Litvinenko)
33. Member, Doctoral Research Awards Committee, American Physical Society, Division of Physics of Beams (Litvinenko)
34. Member, Particle Accelerator Conference Special University Standing Subcommittee (Litvinenko)
35. Member, Fellowship Committee, APS Division of Physics of Beams (Litvinenko)
36. Chair of BNL Council (Litvinenko)
37. Chair, Accelerator Experiment Acceptance Committee, BNL, C-AD (Litvinenko)
38. Member, Muon Technical Advisory Committee (Litvinenko)

39. Reviewer, DoE SBIR proposal (Litvinenko)
40. Reviewer, Physics Review and Physics Review Letters (Litvinenko)
41. Reviewer, Physics Review Special Topics – Accelerators and Beams (Litvinenko)
42. Reviewer, National Science Foundation (Litvinenko)
43. Reviewer, Department of Energy (Litvinenko)
44. Reviewer, IEEE, Journal of Quantum Electronics (Litvinenko)
45. Reviewer, Nuclear Instruments & Methods (Litvinenko)
46. Reviewer, Physical Review ST Accelerators & Beams (Hahn)
47.

2011

1. Divisional Associate Editor for PRL.
2. Member, Fermilab Accelerator Advisory Committee
3. Member, International Executive Committee, FEL Conference
4. Member, Core Organizing Committee, Advanced Accelerator Concepts Workshop
5. Chair, Advanced Accelerator Concepts Prize Committee
6. Chair, IEEE/NPSS Particle Accelerator Science and Technology Prize
7. Chair, IEEE/NPSS Thesis Award Committee
8. Member, International Organizing Committee, ERL Workshop
9. Member International Beam Cooling Workshop Organizing Committee
10. Member, International Advisory Committee, Laser-Beam Interactions and Laser-Plasma Accelerator Workshop
11. Member, Technical Advisory Working Group, DOD High Energy Laser Program
12. Member, LHC Crab Cavity Advisory Board
13. Reviewer SBIR
14. Reviewer NSF proposals
15. Reviewer on IEEE Transaction on Nuclear Science, manuscript TNS-00633-2011
16. Reviewer Physical Review SP: 2011 ZJ10073 (Trbojevic)
17. Reviewer Physical Review SP: 2010 ZC10048 (Trbojevic)
18. SBIR Reviewer: 66b-97926; 28b-9927 (Trbojevic)
19. Reviewer Grant applications for the DOE's SBIR/STTR (Ptitsyn)
20. Dissertation committee for Stony Brook University (Ptitsyn)
21. Journal of Instrumentation (Ptitsyn)
22. Thesis, Stephen Webb, Theoretical considerations for coherent electron cooling, Stony Brook University, May 2011 (Litvinenko)
23. The International Particle Accelerator Conference IPAC'12: member of the Scientific Advisory Board (Belomestnykh)
24. The 50th Advanced Beam Dynamics Workshop on Energy Recovery Linacs, member of the Scientific Program Committee (Belomestnykh)
25. International Conference on RF Superconductivity: member of the International Program Committee (Belomestnykh)
26. Referee for Phys. Rev. Letters, Phys. Rev. ST – Accel. Beams, Nucl. Instrum. & Meth. In Phys. Res A, JINST (Belomestnykh)
27. Reviewer of Phase I and Phase II grant applications submitted under the DOP SBIR/STTR Program (Belomestnykh)
28. Reviewer of DOE Office of Science Early Career Research Program Grant Proposals (Belomestnykh)

29. Review Panel Member: Proton EDM Review, Brookhaven National Laboratory, Upton, NY, March 14, 2011 (Belomestnykh)
30. Review Panel Member: APS-U Design Review for SPX Deflecting Cavity System, Argonne National Laboratory, Argonne, IL, March 3-4, 2011 (Belomestnykh)
31. Member of Machine Advisory Committee of NICA project (JINR, Dubna, Russia) (Fedotov)
32. pEDM design review and proposal to DOE (Fedotov)
33. Elected to Brookhaven Council from C-A Department (Fedotov)
34. Referee for Phys. Rev. Letters and Phys. Rev. ST Accelerator Beams Journals (Fedotov)
35. Reviewer for Physical Review Special Topics – Accelertor and Beams (PRST-AB) and NIMA (Pinayev)
36. Reviewed grants for the SBIR/STTR program (Sheehy)
37. Department of Physics and Astronomy, Stony Brook University (Litvinenko)
38. Member of NSF review of Cornell University CHESS and ERL R&D program, October 2011 (Litvinenko)
39. Chair FEL 2013 Conference (Litvinenko)
40. Chair, International Science Program Committee for 2011 Particle Accelerator Conference, PAC'11, New York (Litvinenko)
41. Chair of FEL Prize Committee (Litvinenko)
42. Member, Scientific Program Committee for 2012 International Particle Accelerator Conference, IPAC'12, New Orleans, LA (Litvinenko)
43. Member, Scientific Program Committee for 2011 International Particle Accelerator Conference, IPAC'11, San Sebastian, Spain (Litvinenko)
44. Member, Doctoral Research Awards Committee, American Physical Society, Division of Physics of Beams (Litvinenko)
45. Member, Particle Accelerator Conference Special University Standing Subcommittee (Litvinenko)
46. Member, Fellowship Committee, APS Division of Physics of Beams (Litvinenko)
47. Chair of BNL Council (Litvinenko)
48. Chair, Accelerator Experiment Acceptance Committee, BNL, C-AD (Litvinenko)
49. Member, Muon Technical Advisory Committee (Litvinenko)
50. Reviewer, DoE SBIR proposal (Litvinenko)
51. Reviewer, Physics Review and Physics Review Letters (Litvinenko)
52. Reviewer, Physics Review Special Topics – Accelerators and Beams (Litvinenko)
53. Reviewer, National Science Foundation (Litvinenko)
54. Reviewer, Department of Energy (Litvinenko)
55. Reviewer, IEEE, Journal of Quantum Electronics (Litvinenko)
56. Reviewer, Nuclear Instruments & Methods (Litvinenko)
57. Reviewer, Physical Review ST Accelerators & Beams (Hahn)
58. Reviewer, Physical Review ST Accelerators & Beams (Tsoupas)
59. Reviewer, Nuclear Inst. And Methods in Physics Research, A (Tsoupas)
60. Referee for Physical Review Special Topics and the DOE-SBIR/STTR program (Calaga)

5. Awards, fellowships

1. Fellow American Physical Society
2. Fellow AAAS
3. Fellow IEEE
4. Free-Electron Laser Prize, 2007
5. Recipient IEEE NPSS Merit Award, 2008
6. Accelerator Physics & Technology Award of Peking University, July 2009 (Xu)
7. 2008 Di Tian Award, Physics and Astronomy Department, Stony Brook University (G. Wang)
8. Reviewer of Nuclear Instruments and Method (X. Chang)
9. Reviewer of SBIR project (X. Chang)
10. Division of Physics of Beams Newsletter, Spring 2008: DPM Members recognized as APS Fellows: Dejan Trbojevic, Brookhaven National Laboratory, Citation: For his original contributions in the design, commissioning and operations of the Tevatron and RHIC colliders, and for the development of new concepts for future accelerators (Trbojevic)
11. D. Trbojevic, US Patent Number 7582886, Filing date: May 12, 2006, Issue date: September 1, 2009, Gantry for medical particle therapy facility
12. PI: D. Trbojevic and D. Lowensein in CRADA – Carbon/proton accelerator design for the cancer therapy
13. Award for the record on invention from Long Island – Suffolk County
14. Report for DTRA: 1 GeV proton accelerator with non-scaling FFAG
15. Brookhaven Science and Technology Award, 2011 (Litvinenko)
16. Recepient of the TOOHIG postdoctoral fellowship (LARP) 2006-2009 (Calaga)
17. Recepient of the American Pysical Society (Particles & Beams) doctoral thesis award, 2007 (Calaga)