



APEX 2009

goals, criteria and selection process

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Content

- Goals of Accelerator Physics Experiments
- Selection process
- Criteria used by the Accelerator Experiments Acceptance Committee
- Q&A



Goals of APEX

- Improving RHIC performance (increasing the integrated luminosity, increasing the figure of merit, improving the background...)
- Developing elements and methods for RHIC future (cooling, eRHIC, low energy RHIC...)
- Developing elements and methods for other accelerators (LHC, NSLS II...)
- Deepening understanding of accelerator physics
- Understanding of engineering issues using RHIC beam



Examples of APEX Successes

- **Stochastic cooling** - initially was developed as part of the APEX, now is the baseline for RHIC II
- **Reduction(s) of β^*** - had been implemented into operations and provided for significant increases in luminosity
- **Tune feed-back and decoupling** - has been implemented into operations and dramatically reduced time for developing of new ramps
- **IBS suppression lattice** - had been implemented into operations, provided for significant increase in d-Au luminosity, base-line for Run 10 Au-Au
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- **And many more** - resulted in higher luminosity, better modes of operation and, finally, in better understanding of RHIC and accelerator physics



Accelerator Experiments Acceptance Committee

date: September 22, 2009
to: Collider-Accelerator Department Personnel
from: D.I. Lowenstein 
subject: FY 2010 Collider-Accelerator Department Committees

V. Litvinenko, Chair
M. Bai
W. Fischer
H. Huang
D. Lowenstein
F. Pilat
P. Pile
T. Roser
S. Vigdor, ALD
P. Yamin

- The committee meets few times per year to review and to classify the proposals
- It also discuss and decides on APEX priorities and selection criteria
- The committee accepts, rejects and evaluate the proposals based on their scientific merit and relevance to present and future of the RHIC program
- The goal is to provide fair evaluation and classification of the proposals
- The committee evaluations is the basis for inclusion of proposals into the APEX sessions



APEX proposals

submit to

Fulvia Pilat, APEX runs coordinator

- <http://www.c-ad.bnl.gov/BeamEx/scripts/beform.pl>
- <http://www.c-ad.bnl.gov/APEX/APEX2009/>



Criteria for Evaluation

- a) Relevance to RHIC performance and operation
- b) Scientific merit
- c) Level of preparedness

Important factors: species needed, time needed

Grading

- | | | |
|---|---|------------------------------|
| 0 | Likely to immediately benefit RHIC machine performance, or crucial to RHIC hardware decision-making | A - must do |
| 1 | Directly benefiting RHIC machine performance (potentially in the future) | B - recommended |
| 2 | Benefiting general community | C - considered for inclusion |
| | | D - declined |



Q & A

