

**ThuPS08**

**Status of Development of the FRIB High Performance Superconducting ECR  
Ion Source**

Eduard Pozdeyev, Nathan Bultman, Guillaume Machicoane, Xing Rao

*FRIB, Michigan State University, East Lansing, MI, USA*

Helene Felice, Aurelio Hafalia, Heng Pan, Soren Prestemon,

*Lawrence Berkeley National Laboratory, Berkeley, CA, USA*

*Corresponding Author: Eduard Pozdeyev, e-mail address: pozdeyev@frib.msu.edu*

Facility for Rare Isotope Beams (FRIB) requires a high performance ECR ion source to produce intense beam of stable ions with the mass up to Uranium. A 28GHz superconducting ECR ion source is being developed at FRIB in collaboration with the Berkeley Superconducting Magnet Group (Supercon). The design of the source cold mass is based on the radial-key clamping scheme developed at Berkeley for high-field, high-performance magnets. In this talk I'll describe projected performance of the source, features of the source design such as the clamping scheme of the cold mass, its benefits for assembly and operation of the cold mass, cryostat design, present status of the project, and discuss future plans.

Work supported by the U.S. Department of Energy Office of Science under Cooperative Agreement DE-SC0000661