



MIT Laboratory for Nuclear Science

Postdoctoral Research Associate Position

The Laboratory for Nuclear Science at MIT invites applications for a postdoctoral research associate position to work on the development of a source of polarized helium-3 ions employing the existing Electron Beam Ionization Source at the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory (BNL), Upton, New York. This work is a collaborative effort between BNL, MIT and others, and the research focus will be at BNL. Helium-3 gas will be polarized using the technique of metastability exchange optical pumping and the polarized atoms will be fully ionized before injection into the RHIC accelerator complex. A polarized helium-3 beam in RHIC would enable new, unique, high energy QCD studies of neutron structure with existing polarized proton beams. In addition, it could be used for important tests of the Standard Model at a future electron-ion collider. The work will be carried out under the supervision of Prof. Richard Milner in collaboration with BNL and others.

A Ph.D. in experimental physics with experience in optical pumping of polarized helium-3 is required. Please send a Curriculum Vitae, publication list, and three letters of recommendation to:

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