



国立研究開発法人理化学研究所 仁科加速器科学研究センター
第326回 RIBF核物理セミナー
RIKEN Nishina Center for Accelerator Based Science
The 326th RIBF Nuclear Physics Seminar

Precision spectroscopy of pionic atoms at RIBF and deduction of chiral condensate at nuclear density

Dr. Kenta Itahashi
(Meson Science Lab., RIKEN CPR)

We have been running the piAF (pionic atom factory) project at RIBF, and have made high precision spectroscopy of 1s and 2p states of pionic Sn121 atoms. The s-wave strong interaction between pions and nuclei was precisely determined from the measured spectrum. The obtained result is further analyzed in terms of the wave function renormalization due to the nuclear medium effect, and the chiral condensate in the nuclear medium is deduced. In this seminar, we will also discuss the technical aspects of the high precision measurement and the future plans.

Sep. 26th (Tue), 2023 13:30 ~
RIBF Hall, RIBF bldg., RIKEN



* The talk will be given in English language.

Contact: Nuclear Physics Seminar Organizing Committee
npsoc@ribf.riken.jp
<http://ribf.riken.jp/~seminar/>