



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280回 RIBF核物理セミナー  
RIKEN Nishina Center for Accelerator Based Science  
The 280th RIBF Nuclear Physics Seminar

Is electron scattering useless to study neutron distribution in nuclei ?

Dr. Toshio Suzuki  
(Research center for Electron Photon Science, Tohoku University)

Electron scattering is an unambiguous tool to investigate the nuclear charge density, since it is perfectly understood theoretically and well established experimentally. For a long time, the charge density is believed to be almost equal to the proton density, and hence, to be useless for studying the neutron distribution in nuclei. The SCRIT facility also may be constructed, aiming to explore the proton density in unstable nuclei, even though the structure of their neutron density would be much more interesting.

The present talk will make clear the difference between the charge density and the proton density, and propose a novel way to explore the neutron density through conventional electron scattering without invoking parity violating one as in JLab.

Oct. 11th(Fri.)2019 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](mailto:npsoc@ribf.riken.jp)  
<http://ribf.riken.jp/~seminar/>