独立行政法人理化学研究所　仁科加速器研究センター
第９７回RIBF核物理セミナー
RIKEN Nishina Center for Accelerator Based
The 97th RIBF Nuclear Physics Seminar

Measurements of Interaction cross sections towards neutron rich Ne isotopes at RIBF

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Interaction cross sections (σI) for $^{20-32}$Ne including the isotopes in the "island-of-inversion" have been measured using BigRIPS at RIBF, RIKEN. Nuclear matter radii were deduced from measured σI with the use of Glauber-type calculation. σI for ^{29}Ne and ^{31}Ne are significantly large even compared with their neighbor nuclides 28,30,32Ne. It has been found that only lower- (s- or p-) orbital halo structures can explain much enhanced σI of ^{29}Ne and ^{31}Ne, nevertheless valence nucleons of those Ne isotopes are expected to occupy higher (d- or f-) orbital angular momentum from the conventional shell model.

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The seminar will be given in English.

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