DREB2022 - Direct Reactions with Exotic Beams



Contribution ID: 271 Type: Oral contribution

ONOKORO project -knockout reaction studies of clusters in heavy nuclei -

Wednesday 29 June 2022 09:00 (20 minutes)

We have started a new research project named the ONOKORO project where we comprehensively investigate clustering in medium-to-heavy mass nuclei using (p, pX) cluster knockout reactions under normal and inverse kinematics.

The research is motivated by our previous study on α clustering in $^{112-124}$ Sn conducted at Research Center for Nuclear Physics, Osaka University [J. Tanaka, Z.H. Yang et al., Science 371, 260 (2021)]. The ONOKORO project will extend the study to d, t, 3 He, α clustering both in stable and unstable nuclei in the mass region of A=36—220.

In the conference, we will present a physics background, research plan at RIBF, RCNP, and HIMAC facilities, and status of detector development for the inverse kinematics knockout experiments.

Topic

Experiment

Author: UESAKA, Tomohiro (RIKEN)

Co-authors: Prof. ZENIHIRO, Juzo (Kyoto University); OGATA, Kazuyuki (Kyushu University / RCNP); Dr

TANAKA, Junki (RIKEN); ONOKORO COLLABORATION

Presenter: UESAKA, Tomohiro (RIKEN)

Session Classification: WED1