

# Direct reactions and spectroscopy with hydrogen targets: past 10 years at the RIBF and future prospects

Contribution ID: 9

Type: **Invited talk**

## Nucleon knockout reactions within the intranuclear cascade model INCL

*Wednesday, 2 August 2023 14:25 (25 minutes)*

The main features of the intranuclear cascade model INCL for describing single-nucleon and multi-nucleon knockout cross sections will be presented in this talk. For the interpretation of experimental data on knockout cross sections, this model is coupled to the deexcitation code ABLA, which calculates the particle separation energies from the atomic mass evaluation AME2020. The results obtained for different data sets from RIKEN and GSI will be shown. Moreover, the new INCL improvements related to the implementation of short-range correlations will also be presented together with the results obtained for neutron and proton knockout cross sections measured in different worldwide facilities.

**Primary author:** RODRIGUEZ SANCHEZ, Jose Luis (University of Coruña)

**Presenter:** RODRIGUEZ SANCHEZ, Jose Luis (University of Coruña)

**Session Classification:** Reaction mechanism