

International Conference on Science and Technology for FAIR in Europe 2014



Contribution ID: 140

Type: **not specified**

The quasi-free scattering program at R3B (NUSTAR)

Wednesday, 15 October 2014 14:00 (20 minutes)

In this contribution I will discuss the quasi-free scattering program at R3B. A compilation of experimental results on the single-particle structure of stable and exotic nuclei probed via the quasi-free scattering reaction in inverse kinematics will be presented. The cross sections and momentum distributions are compared to recent calculations employing the reaction model presented in Ref. [1] and, where available, to previous experimental work. Finally, the future experimental program on quasi-free scattering reactions, which is enabled through the major upgrades in the R3B apparatus and the high intensity radioactive-ion beams foreseen at FAIR, will be discussed.

[1] Aumann, T. and Bertulani, C. A. and Ryckebusch, J., Phys. Rev. C 88, 064610 (2013)

Primary author: PASCHALIS, Stefanos (TU Darmstadt)

Presenter: PASCHALIS, Stefanos (TU Darmstadt)

Session Classification: Parallel Tier 2