



Contribution ID: 38

Type: **not specified**

Alpha particle induced reactions on Sr isotopes

Tuesday, 4 September 2018 15:41 (17 minutes)

Preliminary alpha capture cross sections on Sr at energies close to the Gamow window will be presented. The cross sections were measured by means of the activation method using an alpha beam delivered by the Bucharest IFIN-HH 9MV tandem accelerator. The induced activities were measured with two large volume HPGe detectors in close geometry placed in a low background passive shielding. The experimental results are compared with theoretical predictions obtained in the framework of the statistical model, using the latest version of Talys1.8 and the alpha OMP potential by V. Avrigeanu et al [1].

Keywords: s, r and p nuclei, α particle induced reactions, p- nuclei nucleosynthesis, experimental cross sections

[1] V. Avrigeanu and M. Avrigeanu, Phys. Rev C 91, 064611 (2015).

Selected session

Nuclear Astrophysics

Primary author: Dr OPREA, Andreea ("Horia Hulubei" National Institute for Physics and Nuclear Engineering (IFIN-HH), Bucharest, Romania)

Presenter: Dr OPREA, Andreea ("Horia Hulubei" National Institute for Physics and Nuclear Engineering (IFIN-HH), Bucharest, Romania)

Session Classification: Nuclear Astrophysics