

Contribution ID: 24

Type: Presentation

## Development of high resolution neutron detector HIME

Wednesday, 9 August 2017 10:20 (20 minutes)

I will report on the parasitic test experiment of the HIME detector performed at SAMURAI in Nov.-Dec., 2016. HIME (HIgh resolution detector array for Multi neutron Events) is a new-type high resolution neutron detector designed to detect multi neutrons at 100-300 MeV in coincidence with high resolution. High granularity of HIME enables us to track the recoil protons to distinguish the multi neutrons and to enhance the position and timing resolutions. I will also present about the tracking algorithm we have developed. Note that the proposal to use HIME to measure the correlation in the barely unbound nucleus has recently approved as grade-A at RIKEN NP-PAC meeting in Dec. 2016.

Primary author: Ms SAITO, Atsumi (Tokyo Institute of Technology)

**Co-authors:** Prof. NAKAMURA, Takashi (Tokyo Institute of Technology); Mr TOMAI, Takato (Tokyo Institute of Technology, Department of physics); Dr TOGANO, Yasuhiro (Rikkyo University); Dr KONDO, Yosuke (Tokyo Institute of Technology)

Presenter: Ms SAITO, Atsumi (Tokyo Institute of Technology)

Session Classification: Session 5