



東工大 物理学系「物理学リーダーシップ」

FGIP : Foreign Graduate Student Invitation Program

外国人博士課程大学院生の短期招待・共同研究

FGIP - Student Forum セミナー

Dávid Hegedüs (Eötvös Loránd University, Hungary)

日時 : 2019年12月13日(金) 15:45-17:00, 場所 : 南5号館503CD

Coulomb breakup of ^{15}C

Abstract:

Our main research interests are the detailed analysis of the $^{15}\text{C}(\gamma, n)^{14}\text{C}$ breakup reaction and kinetic properties of the process. The total kinematics of the Coulomb breakup of the ^{15}C nuclei at 240 MeV/nucleon bombarding energy was measured at RIKEN using the SAMURAI spectrometer and detection setup as part of the SAMURAI Commissioning experiment.

For analysis, we use several methods to draw conclusions about the inverse reaction of the electromagnetic part of the breakup (the neutron capture of the ^{14}C) which has astrophysical importance. Our particular interest is to gain insight into the details of the breakup reaction with the measurement of the impact parameter dependence of the process. It is available due to the very good angular resolution of the beam tracking drift chambers used in the SAMURAI setup.

In my presentation I will introduce the main methods of the analysis and the experimental



FGIP - Guest student の滞在スケジュール

名前	大学・研究機関	滞在期間	受入担当
Dávid Hegedüs	Eötvös Loránd University, Hungary	11/17 - 12/16	齊藤敦美(中村研)