



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

Simon Lindberg (Chalmers University of Technology, Sweden)

日時：2016年7月29日(金) 13:30 - 15:30, 場所：本館HI55B

Reactions with Relativistic Radioactive Beams and Gamma Multiplicities

Abstract:

The LAND/R3B-setup at GSI, Germany, is a complex system of detectors for identifying and measuring the 4-momenta of all incoming nuclei and products created in reactions with relativistic radioactive beams. The tracking detectors in the setup have a very high spatial resolution, which makes them impossible to align with sufficient mechanical precision. Instead the measured tracks can be used to calculate the exact detector positions during the data analysis. The alignment of the detectors is important to correctly identify both the incoming nuclei and outgoing fragments. In my work I have studied the gamma multiplicities for different reaction channels using radioactive beams ranging from proton rich Li to neutron rich F isotopes. The wide range of isotopes offers the possibility to compare the gamma multiplicities between different reaction channels and the different isotopes.

The analysis showed that the background contribution to the gamma multiplicity was too large to obtain any reliable results though. Different approaches of reducing the background and possible explanations of the large contributions will be discussed.



問い合わせ：中村研究室・齊藤敦美（内線2729）

FGIP - Guest student の滞在スケジュール

名前：Simon Lindberg 大学・研究機関：Chalmers University of Technology, Sweden

滞在期間：7/19 - 8/10 受入担当：齊藤敦美(中村研)

<http://info.phys.sci.titech.ac.jp/leadership/fgip/index.html>

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