

RIBF ULIC Symposium/mini-WS Report

* English only

Date: 2014/03/13

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| Title | [RIBF-ULIC-029] Progress and Future Plans of the Research Group for Reaction Cross Sections |
| Date | 2014 Mar. 11 |
| Place | RIKEN, RIBF building 4F, room 401 |
| Language | [] English [<input type="radio"/>] Japanese |
| HP address | https://indico2.riken.jp/indico/conferenceDisplay.py?confId=1454 |
| Contact Person(s) (Name, Affiliation) | M. Fukuda (Osaka Univ.), D. Nishimura (Tokyo Univ. of Science) |

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| Financial support from ULIC (Users Office Use Only) | Total : | 131,430 | JPY |
| | [Breakdown] | Travel expense and Accommodation fee | |
| | Junichi Ono: | 17,200 JPY | Masaomi Tanaka: 5,750 JPY |
| | Ryosuke Kanbe: | 17,200 JPY | Shintaro Yamaoka: 17,200 JPY |
| | Kota Watanabe: | 15,700 JPY | Masayuki Nagashima: 20,420 JPY |
| | Kazuki Sawahata: | 2,960 JPY | Shin Watanabe: 35,000 JPY |
| Co-hosting / any financial support from other organization(s) | - | | |

Summary of discussions and its (expected) results:

Following subjects related to studies on reaction cross sections were reported and discussed.

- + Recent activities of reaction cross section group, current status, and near future (D. Nishimura, Tokyo U. Sci.)
- + Charge changing cross sections of medium mass nuclides at intermediate energies (S. Ohmika, Saitama Univ.)
- + Charge changing cross sections of Ar isotopes (K. Sawahata, Tsukuba Univ.)
- + Ground state properties of Mg isotopes probed by reaction cross sections - from the theoretical view point (S. Watanabe, Kyushu Univ.)
- + A possibility of reaction cross section as a probe for deformation parameter of a nucleus (M. Ishihara, RIKEN)
- + Reports of current status from each sub-group [M. Fukuda (Osaka), T. Suzuki (Saitama), A. Ozawa (Tsukuba), D. Nishimura (Tokyo U. Sci.), T. Ohtsubo (Niigata)]

For every subject, various interesting points were shown and problems were pointed out. Based on these discussions, each sub-group will make efforts to solve these problems. It was quite valuable that we had useful discussions with a theorist (S. Watanabe san) from Kyushu University participated in the workshop and expected a fruitful future collaboration between the theory group (Kyushu U + Hokkaido U) and our experiment group, which is next for reaction cross sections of Na, Al, Si, P isotopes.

Prof. Ishihara suggested an interesting and valuable point of view on the deduction of deformation parameter of a nucleus from the reaction cross section. This point was discussed and considered to be possibly a valuable approach to explore the nuclear deformation.

Participants list(Name, Affiliation):

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