RIBF ULIC Symposium/mini-WS Report

* English only

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Name of Applicant	Kenichi Yoshida		
Affiliation	Osaka University	e-mail	kyoshida@rcnp.osaka-u.ac.jp
Tel		Fax	

Title	[RIBF-ULIC-miniWS038: Fission of neutron-rich explored by nuclear theory and experiments]		
Date	16, 17 Feb. 2023		
Place	RIBF Large Conference Room, RNC, RIKEN		
Language	[] English [🗸] Japanese		
HP address	http:///indico2.riken.jp/event/4300/		
Contact Person(s) (Name, Affiliation)	Kenichi Yoshida (Osaka U), Shoya Tanaka (RNC, RIKEN), Nobuya Nishimura (CPR, RIKEN)		

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Summary of discussions and its (expected) results:

In this workshop, we discussed the physics of nuclear fission, especially for neutron-rich heavy nuclei, where future experiments are expected in the RIBF. There were 11 scientific talks covering recent progress in the theory and experiment. We also had discussion sessions for "Applications to r-process nucleosynthesis" and "Developments for precise nuclear models" based on the above talks and the status of RIBF facilities. In Japan, dynamical-model calculations of fission have been conducted extensively, and those results show a good degree with available experimental data measured in the current facility, e.g., JAEA. However, fission models based on microscopic physics do not reach the level of quantitative description of fission data. Future investigations on fission for neutron-rich nuclei at the RIBF are highly desired in studying the r-process and are also essential for developing the theory. Along with the experiments, the collaboration of various theorists is also necessary.

Participants list (Name, Affiliation):

Main participants

- Y. Aritomo (Kindai U), M. Asai (JAEA), K. Hagino (Kyoto U), N. Hizawa (Kyoto U),
- C. Ishizuka (Tokyo Tech), F. Minato (JAEA), N. Nishimura (CPR, RIKEN), K. Nishio (JAEA),
- K. Okada (Kansai U), H. Sasaki (LANL), S. Tanaka (RNC, RIKEN), K. Uzawa (Kyoto U),
- K. Washiyama (U Tsukuba), Y. Watanabe (KEK), K. Yoshida (Osaka U)

(The list of other participants is attached.)