

RIBF ULIC Symposium/mini-WS Report

* English only

Date:

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Title	[RIBF-ULIC- mini-WS : Exploring nuclear shapes through RIBF studies and high-energy nuclear collisions]		
Date	2024 Sep. 30		
Place	RIBF #201		
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HP address	https://indico2.riken.jp/event/4878/		
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Summary of discussions and its (expected) results:

Recent advancements in transport models and machine learning techniques have enabled detailed investigations of nuclear properties using event-by-event analysis of heavy-ion collision data. This workshop brought together experts from both fields to discuss recent developments and explore new research directions. We aimed to foster collaboration between researchers in heavy-ion collisions and nuclear structure/reaction physics, with a focus on understanding nuclear shapes and deformations through the analysis of flow data.

Presentations and Discussions:

The workshop featured presentations from both heavy-ion and nuclear structure communities. The invited speakers [Murase, Sakai, Nara, Yamagami, Hagino, Fukuda, Nishimura] gave talks on their respective research areas, covering topics such as:

- The theoretical foundations of flow simulations in heavy-ion collisions
- Analysis of experimental data from Xe+Xe collisions
- Microscopic transport models for heavy-ion collisions
- Basics of Nuclear deformation and its impact on nuclear properties
- Measurements of reaction cross sections using polarized beams

The presentations were followed by lively discussions, which highlighted the complementarity of the two fields.

Outcomes and Future Directions:

The workshop was highly successful in fostering collaboration between the two communities. Key

outcomes include:

- A deeper understanding of the connections between nuclear structure and heavy-ion collision phenomena.
- The initiation of several new collaborative projects.
- A consensus to organize the next workshop

Participants list(Name, Affiliation):

- 1,Kouichi Hagino,"Department of Physics, Kyoto University"
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