Report on the workshop "Advances and applications of intermediate-energy hadron-nucleus scattering"

M. Kimura*1 for the Organizing Committee

Introduction: A workshop titled "Advances and Applications of Intermediate-Energy Hadron-Nucleus Scattering" was held at RIKEN RIBF on November 30, 2024. The primary purpose of this workshop was to serve as a memorial meeting, reflecting on the significant research in hadron and nuclear scattering reactions conducted by the late Akihisa Kohama. Dr. Kohama, who was a Senior Research Scientist at RIKEN, passed away on May 28, 2023, at the age of 59. The workshop gathered individuals who had research connections with him. The initiators included Dr. Hiroyoshi Sakurai (Chief Initiator) and many others.

Participants: The workshop was attended by more than 50 participants, who joined from a variety of institutions, reflecting broad engagement from the community connected to Dr. Kohama's work. In addition to them, his wife, former teachers, and friends at the University also attended the event and shared their memories of Dr. Kohama's school days.

Workshop Program and Contributions: The workshop program featured a series of contributions covering various aspects of intermediate-energy hadron-nucleus scattering, specifically chosen to reflect the research area of Dr. Kohama. The presentations were given by his supervisors, collaborators, and friends.

The contributions included:

- Prof. Hiroo Kohama's Doctoral Thesis by Prof. Koichi Yazaki (RIKEN)
- Kurotama model and PHITS by Hiroshi Iwase (KEK)
- Topic on nuclear surface determination by Ryoichi Seki

- Beyond the Kurotama model—Quantification of nuclear surface effects by Wataru Horiuchi (Osaka Metropolitan University)
- Past and Future of the Kurotama model by Kei Iida (Kochi University)
- Closing by Kazuhiro Oyamatsu (Aichi Shukutoku University)

These talks highlighted ongoing research and reflections related to the fields to which Dr. Kohama dedicated his work and life. His friends also made a speech to share their memories of Dr. Kohama.

Conclusion: The workshop "Advances and Applications of Intermediate-Energy Hadron-Nucleus Scattering" served as a valuable memorial event, successfully bringing together his family, teachers, and friends to honor and review his contributions to the field of hadron and nuclear physics. The program successfully covered relevant topics and ongoing research, reflecting the impact of his life-long work. The gathering provided an opportunity for those connected to Dr. Kohama to reflect on his significant contributions to the field.

Acknowledgments: The organizers express their gratitude to the conveners and initiators for their efforts in organizing this memorial workshop. Special thanks are also extended to RIKEN and the RIKEN Nishina Center for providing the venue and support for the event.



^{*1} BIKEN Nishina Center