

## HIAT 2025 Preface

The Sixteenth International Conference on Heavy Ion Accelerator Technology (HIAT 2025) was held at the Kellogg Center on the campus of Michigan State University (MSU) in East Lansing, Michigan, USA. The conference was hosted by the Facility for Rare Isotope Beams (FRIB). The opening reception and student poster session were held on Sunday, 22 June 2025. The closing ceremony was held on Friday, 27 June 2025, followed by an FRIB tour.

HIAT is dedicated to the design, construction, development and operation of stable and unstable heavy-ion accelerators and their components. It focuses on the operational experience of existing facilities, achievements in heavy-ion accelerator physics and technology, progress on the implementation of new projects and infrastructure upgrades, and trends in the proposal, design, and application of heavy-ion accelerators, as well as their main systems and components.

The HIAT 2025 program included invited and contributed talks, poster sessions, an excursion, and a conference dinner. All talks were presented in plenary sessions. A total of 129 delegates participated in the conference, representing 44 institutions and 21 countries; 4 companies participated in the industrial exhibit.

A total of 140 abstracts were submitted for HIAT 2025. A total of 35 invited talks and 27 contributed talks were presented in the plenary sessions. A total of 53 posters were presented in the poster sessions on Monday, Tuesday, and Wednesday. A total of 79 papers were submitted for publication in the proceedings.

The organizers were able to provide limited support for student participation in the conference. The student grants covered the registration fees and lodging; grants were awarded to 5 student delegates: **Philippe Belanger** (TRIUMF), **Onur Gilanliogullari** (ANL), **Zachary Hosek** (FRIB & ORNL), **Ysabella Kassandra Ong** (INFN-LNL), and **Anthony Tran** (FRIB & ANL).

A total of 17 posters were presented in the student poster session (in addition to being presented in the regular Monday-to-Wednesday poster sessions). Two student poster presenters were recognized for outstanding presentations and received monetary prizes. The student poster judges were members of the HIAT 2025 International Advisory Committee. The first-place prize recipient was invited to present a short talk during the awards session.

The first-place prize was awarded to **Christian Ireland** (FRIB) for the poster “Developing a next-generation MR-ToF device for the Facility for Rare Isotope Beams.”

The second-place prize was awarded to **Jacob Brown** (FRIB & Fermilab) for the poster “Study of ponderomotive instability in the FRIB beta = 0.53 half-wave resonator.”

An excursion to the Meijer Gardens outside of Grand Rapids, Michigan was held on Thursday afternoon, followed by the conference dinner at the Kellogg Center.

This conference is the first time for FRIB to serve as the HIAT host. MSU operates FRIB as a user facility for the US Department of Energy Office of Science. The FRIB linear

accelerator includes a normal-conducting radio-frequency quadrupole and 324 superconducting radio-frequency cavities. User operations began in May 2022. Routine operation with 20 kW beams has been provided in the past year.

The HIAT 2025 organizers would like to express their appreciation for the work and enthusiasm of the HIAT 2025 delegates, exhibitors, session chairs, editors, student assistants, and others who ensured that the conference was a success.

Peter Ostroumov, Conference Chair

Alexander Plastun, Local Organizing Committee Chair

24 September 2025