

FRIB Scientific Users

Michigan State University (MSU) operates the Facility for Rare Isotope Beams (FRIB) as a user facility for the U.S. Department of Energy Office of Science (DOE-SC), with financial support from and furthering the mission of the DOE-SC Office of Nuclear Physics. FRIB is open to researchers, or scientific users, from around the world based on the merit of their proposals for scientific research.



Approximately 1,800 scientific users are engaged in FRIB science and instrumentation. They organized themselves in an independent FRIB Users Organization (fribusers.org), with 21 working groups specializing in instruments and scientific topics. Members are from 134 U.S. colleges and universities, 13 national laboratories, and 51 countries, composed of scientists, postdoctoral research associates, and graduate students. There are 1,108 U.S. users in the organization.

The user community meets annually at the Low Energy Community Meeting (LECM) and rotates locations each time (photo shows attendees of the 2024 meeting). LECM provides an opportunity for nuclear scientists to interact and discuss future plans, initiatives, and facilities.

FRIB Experiments Underway

Since the start of user operation in May 2022, FRIB has delivered more than 280 rare isotope beams to experiments and supported 778 participants (619 from the U.S.), including 207 students, across 134 experiments, 21 countries, and 141 institutions. Published results are available at frib.msu.edu/publications.

In 2024, FRIB is providing a broad scientific program, serving more than 450 scientific users from about 125 institutions, and continuing technical developments to further enhance user discovery opportunities.

High Demand for High-Merit Science at FRIB

FRIB is oversubscribed and can only accommodate a third of all requested beam time. Since 2022, FRIB has received 250 proposals for beam time use. The beam list is online at frib.msu.edu/beams.

The approved science program covers the spectrum of FRIB science themes—properties of rare isotopes, nuclear astrophysics, fundamental interactions, and applications for society, including in homeland security. FRIB Program Advisory Committee (PAC) recommended experiments also utilize the full range of FRIB's capabilities—fast, stopped, and reaccelerated rare-isotope beams—and use all FRIB experimental areas and major FRIB instruments.

Interest in FRIB's scientific program remains exceedingly high. We received 84 proposals and 22 letters of intent for beam time, representing 632 participants—more than ever before—to be considered at the FRIB PAC3 meeting. FRIB PAC3 will consider proposals for experiments using fast,



Origin of Submitted Proposals to PACs Since 2022

Countries

U.S. States

stopped, and reaccelerated rare-isotope beams from the FRIB linear accelerator (linac) at its meeting in January 2025.

Visit frib.msu.edu/users or contact the FRIB Manager for User Relations at useroffice@frib.msu.edu.

Learn more at frib.msu.edu