

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), supporting 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 and ready for science at FRIB. They organized themselves in an independent FRIB Users Organization (fribusers.org), with 21 working groups specializing in instruments and scientific topics. Members are from 125 U.S. colleges and universities, 13 national laboratories, and 53 countries, composed of scientists, postdoctoral research associates, and graduate students.

The user community meets annually at the Low Energy Community Meeting (LECM) and rotates locations each time (photo shows attendees of the 2023 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 260 rare isotope beams to experiments and supported 1,263 participants, including 340 students, across 89 experiments, 101 countries, and 354 institutions (including U.S. national laboratories, colleges, and universities: Argonne National Laboratory, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, Florida State University, Mississippi State University, Rutgers University, University of Tennessee Knoxville, Ursinus College, and more; and the Institute for Basic Science (Korea), RIKEN (Japan), Gesellschaft für Schwerionenforschung (Germany); universities in the United Kingdom, Italy, France, Spain, Sweden, Canada, and many others).

Published results are available at frib.msu.edu/publications.

In 2024, FRIB will provide 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 in high demand in service to its global user community. About 35% of the requested beam time following the second Program Advisory Committee (PAC2) was allocated by the FRIB Laboratory director. PAC-approved experiments represent:

- · 38 out of 84 experiments proposed
- · 454 out of 611 scientists
- 4,127 hours out of 11,859 facility-use hours
- 23 out of 27 countries
- 111 institutions

The PAC is comprised of world-leading scientists who peer-review proposals based on scientific merit, consistent with DOE-SC user facility policy.



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. 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.

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

Learn more at frib.msu.edu