EAST LANSING, Mich. (AP) — Michigan's congressional delegation broke ground on a $730 million physics research facility at Michigan State University on Monday, more than five years after the federal government announced the project.

U.S. Sens. Carl Levin and Debbie Stabenow were among those celebrating the Facility for Rare Isotope Beams, a nuclear research center funded primarily by the U.S. Department of Energy, as well as by Michigan and Michigan State.

Levin called the project "another step on the human quest to know more" that will create "tangible progress" in scientific research and national security.

The research facility, known as FRIB, is expected to open between 2020 and 2022, and will be available to scientists from any university or country. It will contain a high-power superconducting linear accelerator, a machine that can produce beams of subatomic particles traveling at half the speed of light. The collision of those beams with a target produces rare isotopes that are no longer found on Earth.

Roughly 1,350 scientists around the world are involved in the study of rare isotopes, which could help answer scientific questions about the evolution of the universe. Isotope research could also improve techniques for destroying nuclear waste and develop uses for diagnosing and curing diseases.

President Barack Obama has proposed spending $90 million in the coming budget year to keep the project on track. Congress approved $55 million for the current budget year.

Levin said plans for FRIB and its funding came together during "countless meetings at the White House" where Michigan representatives emphasized "the importance of FRIB to economic growth and science leadership."

Backers estimate FRIB will produce $1 billion in economic activity and will create 5,000 construction jobs and 400 permanent jobs.

"I can tell you as a member of the Budget Committee, when what we are doing is seeing cut after cut after cut, the fact that we've been able to bring this together with the strong support and full funding from the White House, strong support from a bipartisan delegation, I think is very significant," Stabenow said.

Michigan State won a national competition to host the project in December 2008, besting the Argonne National Laboratory in Illinois. Michigan State President Lou Anna Simon said FRIB will build on the successes of the school's National Superconducting Cyclotron Laboratory, a national user facility completed in the 1980s.