EAST LANSING, MI — A nuclear research facility at Michigan State University is expected to receive $100 million from the federal government under a large omnibus spending bill being voted on this week.

Construction of the Facility for Rare Isotope Beams (FRIB [http://frib.msu.edu/]) in East Lansing will get full requested funding under the year-end appropriations bill, a $1.1 trillion spending package that funds the federal government through September.

Earlier versions of the bill had dropped funding by a few million.

Sen. Gary Peters, D-Bloomfield Hills, called the nuclear physics facility — where researchers will study elements that do not occur naturally on Earth — a "transformative" project that will "attract folks from all over the world."

"This will pay huge dividends for our state," said Peters.

The federal government awarded MSU the FRIB project in 2008 after Michigan Congressional delegates waged a campaign to overcome competition from the Argonne National Laboratory in Illinois. Construction started last year [http://www.mlive.com/lansing-news/index.ssf/2014/01/michigan_state_frib_project_fu_1.html].
In 2014, the U.S. Department of Energy approved the $730 million cost for the facility, including $635.5 million in federal money. Since 2009, FRIB has been allocated $218 million in federal funding to complete the project.

The university has until 2022 to finish the facility, but hopes to finish by 2020. The university says construction of the facility is 10 weeks ahead of schedule. (Click here to see live webcams of construction) 

FRIB will house a high-powered superconducting linear accelerator that accelerates heavy ions and produces rare isotopes; short-lived atomic nuclei not found on Earth.

The research has application in fields like energy, medicine and national security, and may also lead to better understanding of the origins of the universe.

By studying rare isotopes, which can exist for only a fraction of a second, scientists hope to improve medical imaging and cancer treatments, improve next generation nuclear reactors and discover ways to destroy nuclear waste.

The facility will create up to 400 jobs for scientists, engineers and staff, and bring together nearly 1,400 nuclear minds from around the world, says MSU.

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