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Stopped and re-accelerated rare isotope beams at FRIB at MSU

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FRIB, the US's "Facility for Rare Isotope Beams" to be built at Michigan State University (MSU), will be based on a 400 kW, 200 MeV/u heavy ion driver linac. Once realized, FRIB will be a world-leading rare isotope beam facility. FRIB will provide a wide variety of high-quality beams of unstable isotopes at unprecedented intensities. Exciting research perspectives will be opened not only with fast, but also with stopped and reaccelerated beams. FRIB will be able to build on rare isotope beam capabilities that exist or under development at the NSCL. High-precision Penning trap mass measurements with stopped rare isotopes are successfully conducted since several years, laser spectroscopy is in preparation and ReA3, a modern reaccelerator, is presently being built.