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Commissioning the EMMA spectrometer at TRIUMF NICHOLAS ESKER, BARRY DAVIDS, MARTIN ALCORTA, TRIUMF, KEVAN HUDSON, Simon Fraser University, MATTHEW WILLIAMS, University of York / TRIUMF — The ElectroMagnetic Mass Analyser (EMMA) is a new experimental facility at TRIUMF. Located after the ISAC-II accelerator, EMMA is a symmetric QQEDEQQ-type mass spectrometer capable of separating the recoiling nuclear reaction products from the beam. With the low emittance radioactive beams delivered from ISAC-II at energies up to at least 6.5 A MeV, EMMA is designed for fusion evaporation and transfer reactions of interest in nuclear structure and astrophysics studies. A vacuum mode separator, EMMA disperses ions according to mass/charge in the focal plane. During a successful commissioning run in Dec. 2016, the dispersion and resolving power were measured and found to agree with ion optical calculations. In the future, cross section measurements and decay spectroscopy studies will be performed using a parallel grid avalanche counter, Si implantation detectors, and external high purity Ge detectors at the focal plane. When coupled with the TIGRESS γ-ray detector array, in-beam spectroscopy at the target will also be available. Today, we present the current status of the EMMA mass spectrometer as it continues to undergo commissioning and begin its experimental life.

Nicholas Esker
TRIUMF

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