

Abstract Submitted
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Commissioning and Initial Operation of the Recoil Mass Spectrometer EMMA at TRIUMF¹ BARRY DAVIDS, TRIUMF and Simon Fraser University, NICHOLAS ESKER, TRIUMF, MATTHEW WILLIAMS, TRIUMF and the University of York, UK — The Electromagnetic Mass Analyser (EMMA) is a new vacuum-mode recoil mass spectrometer currently undergoing the final stages of commissioning at the ISAC-II facility of TRIUMF. EMMA employs a symmetric configuration of electrostatic and magnetic deflectors to separate the products of nuclear reactions from the beam, focus them in both energy and angle, and disperse them in a focal plane according to their mass/charge (m/q) ratios. The spectrometer was designed to accommodate the γ -ray detector array TIGRESS around the target position in order to provide spectroscopic information from electromagnetic transitions. EMMA is intended to be used in the measurement of fusion evaporation, radiative capture, and transfer reactions for the study of nuclear structure and astrophysics. Its complement of focal plane detectors facilitates the identification of recoiling nuclei and subsequent recoil decay spectroscopy. In this talk we shall describe the facility and report on commissioning efforts.

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