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## New Results from GRETINA at NSCL<sup>1</sup>

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The Gamma-Ray Energy TRAcking In-beam Nuclear Array GRETINA was installed in front of the S800 Magnetic Spectrograph for an in-flight gamma-ray spectroscopy campaign with fast beams of rare isotopes. In this type of experiments, rareisotopes beams provided by the Coupled Cyclotron Facility of the National Superconducting Cyclotron Laboratory (NSLC) at Michigan State University are delivered onto a reaction target placed at the center of GRETINA. Reaction residues are detected in the spectrograph in coincidence with gamma rays in GRETINA. The high spatial resolution of GRETINA allows to perform accurate Doppler-shift reconstruction of the gamma-ray energies emitted by the reaction residues moving at velocities typically exceeding 30% of the speed of light. GRETINA's tracking capability enables to acquire gamma-ray data of high spectral quality. During this one-year campaign, 24 experiments were performed using this powerful setup, covering topics in nuclear structure and nuclear astrophysics. This presentation will summarize the latest status of the physics' results obtained from this fruitful campaign.

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