

Invited Talk: Gamma-ray and Conversion Electron spectroscopy at ISAC, TRIUMF

Tuesday, 16 April 2024 12:15 (25 minutes)

The atomic nucleus represents a quantum many-body system governed by strong interaction. Understanding how the strong force binds nucleons together within nuclei is fundamental to our comprehension of the universe's existence. Nuclear physics seeks to unravel the structure and dynamics of nuclei, aiming to shed light on these fundamental questions. At TRIUMF, we employ state-of-the-art infrastructure, including Compton-suppressed high-purity germanium clover detectors complemented by a suite of ancillary detectors for precise measurements of nuclear properties. This presentation offers an overview of our advanced instrumentation and highlights recently published results, tackling questions from the origin of chemical elements in stellar explosions to the nucleus's response to varying neutron-to-proton ratios, and the fundamental interactions of matter's basic constituents.

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Session Classification: Nuclear Physics Measurements - Home and Away