

## Studies of E0 transition strengths at TRIUMF-ISAC

### Contenu

The GRIFFIN and TIGRESS HPGe spectrometers are used for a variety of nuclear structure, nuclear astrophysics, and fundamental symmetries investigations at TRIUMF's Isotope Separator and Accelerator (ISAC) ISOL radioactive beam facility. The investigation of shape coexistence and electric monopole (E0) transition strengths is a strong theme of many experiments.

The GRIFFIN spectrometer provides unique opportunities in decay spectroscopy research with stopped radioactive beams. The HPGe array is complimented by a powerful suite of ancillary detector sub-systems that includes cryogenic Si(Li) detectors for conversion electron measurements and an array of eight LaBr3 scintillators for fast-timing measurements. The TIGRESS spectrometer is used for studies with accelerated radioactive beams and is operated in conjunction with a range of particle detector sub-systems. The SPICE detector for in-beam internal conversion electron spectroscopy employs a magnetic lens formed of permanent magnets.

An overview of the experimental capabilities will be given through detailed examples of recent results for E0 transitions in Ge isotopes and  $^{188}\text{Hg}$  using GRIFFIN as well as in  $^{70,72}\text{Se}$  using SPICE.

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