

## **Use of DANTE in Fast Nuclear Timing at TRIUMF**

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The TRIUMF-ISAC DANTE (Di-Pentagonal Array for Nuclear Timing Experiments) BaF<sub>2</sub> array, integrated into the 8pi apparatus, has been used in an extensive study of the low-energy states of <sup>152</sup>Sm both to validate use of the array for timing measurements and to understand the challenges associated with integrating multiple barium fluoride detectors into the 8pi array in service at TRIUMF. New measurements of the half-life of the 121 keV 2<sup>+</sup> state of <sup>152</sup>Sm will be presented and compared with previous literature values. The sensitivity of the DANTE array to interferences from isotopes with similar nuclear structure such as <sup>154</sup>Gd will also be demonstrated.