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Simplified Hexapod Alignment for GRETINA

GRETINA is a ¼ scale diminutive version of the proposed Gamma-Ray Energy Tracking Array (GRETA). This new type of gamma-ray detector is designed to study the structure and properties of atomic nuclei. It uses large crystals of hyper-pure germanium and is the first detector to use the concept of gamma-ray energy tracking.1 In August 2013 the GRETINA detector was delivered to the Argonne Tandem Linac Accelerator System (ATLAS) for an experimental run. GRETINA consists of two machined aluminum hemispheres in which several gamma ray detectors are mounted. Each hemisphere is cantilever-mounted to a manually operated hexapod alignment frame. Only one hemisphere is in use at Argonne. A direct, simplified hexapod alignment method utilizing a laser tracker and optimally placed fiducials is presented.

Summary

This is a poster presentation only, no paper

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