

# Physics Department Seminar

Friday May 3<sup>rd</sup>, 2013

11:00am in PhSc 105

## “Capacitive Multiplexing in Germanium Radiation Imagers”



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### Abstract:

Gamma-ray imagers based on high purity germanium (HPGe) use multiple segmented strips of germanium to determine the position of gamma emitters. To reduce electronic complexity, a simple readout method involving non-uniform capacitive multiplexing was investigated. Equations for determining the optimum capacitive configuration will be derived, compared to experiment, and discussed. The applications of this electronic configuration include Compton telescopes and coded aperture imaging.

