



## Poster session 4 – Friday 8 July

### P4.075 A next-generation $^{76}\text{Ge}$ double-beta decay experiment

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The search for neutrinoless double beta decay might be the only window to observe lepton number violation and to establish the nature of neutrinos. Historically, the isotope  $^{76}\text{Ge}$  has played an important role in this search and experiments using this isotope have the lowest background if normalized to the region of interest. This poster presents a proposed program for a next generation double beta decay experiment using  $^{76}\text{Ge}$ . The ultimate goal is to operate an array of Ge detectors capable of addressing the parameter space corresponding to the inverted neutrino mass ordering. A background index of 0.1 cnt/(ROI t yr) will ensure quasi-background free operation and hence best sensitivity for a discovery.