



## Poster session 4 – Friday 8 July

P4.052 **Analysis techniques for the evaluation of the neutrinoless double-beta decay lifetime in  $^{130}\text{Te}$  with CUORE-0**

S Pozzi

INFN/Università Milano Bicocca, Italy

*on behalf of CUORE collaboration*

CUORE-0 is a bolometric detector array located at the Laboratori Nazionali del Gran Sasso that was designed to validate the background reduction techniques developed for the CUORE experiment. CUORE-0 is also a competitive  $0\nu\beta\beta$  decay search in its own right and a key benchmark for the development of the analysis tools and procedures to be used in CUORE. The poster will cover the techniques used for data collection, event selection and processing, evaluation of signal efficiency and derivation of the  $0\nu\beta\beta$  decay half-life limit. A characterization of the radioactive background in the  $0\nu\beta\beta$  region of interest will also be provided.