

# CALICE SiW ECAL - Beam test performance of a technological prototype of a highly granular silicon tungsten calorimeter

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A highly granular silicon-tungsten electromagnetic calorimeter (SiW-ECAL) is the reference design of the ECAL for International Large Detector (ILD) concept, one of the two detector concepts for the detector(s) at the future International Linear Collider. Prototypes for this type of detector are developed within the CALICE Collaboration. The technological prototype addresses technical challenges such as integrated front-end electronics or compact layer and readout design.

During Autumn/Winter 2019/20 a stack of up to 18 layers with a dimension of  $\sim 18 \times 18 \times 0.2 \text{ cm}^3$  will be compiled for a beam test at DESY in March 2020. We will present preliminary results on the linearity w.r.t. to electromagnetic showers and the energy resolution as well as on shower shapes. An outline on the next steps will be given. One aspect that has to be addressed in the future is the proper technical implementation of power pulsing with local, i.e. next to the ASICs, power storage.

## Funding information

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