

# Construction and Assembly of the first Barrel Slice for the Electromagnetic Calorimeter of the PANDA experiment

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The first major assembly stage of the barrel part of the electromagnetic calorimeter of the PANDA experiment at the future FAIR facility by assembling one single barrel slice segment will be presented. The calorimeter is composed of two endcaps and a barrel covering the major part of the solid angle consisting of more than 11.300 tapered PbWO<sub>4</sub> crystals. Each scintillator module is readout via two large area avalanche photo diodes connected to custom made ASIC-preamplifier. The construction of the first segment comprises a full length slice beam holding in total 18 module blocks. Each block consists of a matrix of 4x10 crystals. The assembly procedure of single detector modules, module blocks and the overall slice segment, respectively will be discussed. Test results of single components and fully assembled detector modules will be discussed and compared with earlier prototype in-beam and lab tests. Supported by BMBF, GSI and HIC for FAIR.

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