

## Electromagnetic calorimeter prototype for the SoLID project at Jefferson Lab

*Tuesday, 23 May 2017 10:12 (18 minutes)*

SoLID (Solenoidal Large Intensity Device) is a new, general-purpose, large acceptance spectrometer being planned for experimental Hall A at Jefferson Lab, Newport News, Virginia, USA. The shashlik-type sampling technique will be used for the electromagnetic calorimeter for SoLID. This calorimeter is 20 radiation-lengths long with 194 layers each of 1.5mm-thickness plastic scintillators alternating with 0.5mm-thickness lead plates. A few calorimeter prototype modules have been built at Shandong University. The light yield of these modules has been test with cosmic ray. Preliminary beam tests were carried out as well. The building process of these calorimeter prototype modules, cosmic ray and beam test results will be presented.

**Primary author:** Mr TIAN, Ye (Shandong University)

**Co-authors:** Mr LI, Ang (Shandong University); Prof. FENG, Cunfeng (Shandong university); Prof. JIAO, Jianbin (Shandong University); Prof. ZHENG, Xiaochao (Virginia University); Mrs YU, Yanhong (Shandong University)

**Presenter:** Prof. FENG, Cunfeng (Shandong university)

**Session Classification:** R1-Calorimeters(2)

**Track Classification:** Calorimeters