

## Annual modulation search by XMASS-I

*Monday, 24 July 2017 13:45 (15 minutes)*

A search for dark matter was conducted by looking for an annual modulation signal due to the Earth's rotation around the Sun using XMASS-I detector at Kamioka. It is a single phase Xe detector with 832 kg surrounded by low radioactive 642 PMTs with a water tank for cosmic muon veto. The detector has been performed satisfiable operation over 3 years with a very high light yield of 15 photoelectron/keVee. In this presentation, a new result with 1keVee energy threshold will be shown with 800 live days x 832 kg exposure in total by adding about 450 live days to previous result in 2016.

**Primary authors:** YAMASHITA, Masaki (The University of Tokyo); FOR THE XMASS COLLABORATION

**Presenter:** YAMASHITA, Masaki (The University of Tokyo)

**Session Classification:** Dark Matter

**Track Classification:** Dark Matter