

# KMI Colloquium

## Direct dark matter search with XMASS



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### Abstract:

XMASS is a multi-purpose experiment using ultra-pure liquid xenon. The first stage of XMASS experiment (XMASS-I) uses the world-largest target mass, 832kg, and realizes low-energy threshold, 0.3keV electron equivalent, which is important for detecting low-energy events caused by dark matter particles. In this talk, various approaches to search for weakly interacting massive particles (WIMPs) and super-WIMPs, and status of an analysis of seasonal modulation will be presented. Recent development of dome-shape PMTs for the next stage detector, XMASS-1.5, will be reported as well.

