

IDM2008 - Identification of Dark Matter 2008

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XMASS experiment (15'+5')

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A direct dark matter search experiment, XMASS, uses 800kg of liquid xenon and its fiducial mass is 100kg. It uses newly developed background PMTs and makes use of self-shielding method to reduce external backgrounds. The background rate in the signal region is expected to be 10^{-4} /kg/keV/day and it will achieve the experimental sensitivity of 10^{-45} cm² for the spin independent interactions for the dark matter mass of around 100GeV. The new underground cavity to house the experiment has completed in February this year and the construction of the XMASS experiment will finish by summer, 2009.

We will discuss the status of the XMASS experiment.

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