

**FAKULTÄT für PHYSIK  
LUDWIG-MAXIMILIANS-UNIVERSITÄT  
MÜNCHEN/GARCHING**

**PHYSIK-DEPARTMENT  
TECHNISCHE UNIVERSITÄT MÜNCHEN  
MÜNCHEN/GARCHING**

## **MLL-KOLLOQUIUM**

**Donnerstag, 17.11.2016, 16<sup>15</sup> Uhr**

Hörsaal der LMU in Garching, Am Coulombwall 1  
Treffen zum gemeinsamen Kaffee 16 Uhr

**PD Dr. Teresa Marrodán Undagoitia**  
(MPI f. Kernphysik / Heidelberg)

### **The XENON1T dark matter experiment**

Despite the overwhelming evidence for dark matter from cosmological and astronomical indications at various scales, a clear evidence for a particle explaining these observations remains absent. XENON1T is a liquid xenon detector capable of exploring a large fraction of the available parameter space for weakly interacting massive particles (WIMPs). The experiment aims to detect WIMP-nucleon interactions using a dual phase time-projection-chamber with a total target mass of about 2 tons. The talk reports on the status of the experiment which started data taking this autumn. Some latest results of the XENON100 experiment are briefly reviewed as well.

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