

FAKULTÄT für PHYSIK
LUDWIG-MAXIMILIANS-UNIVERSITÄT
MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT
TECHNISCHE UNIVERSITÄT MÜNCHEN
MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 18.05.2017, 16¹⁵ Uhr

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

Dr. Tina Pollmann

(Physik Department E15, TUM)

The DEAP-3600 dark matter experiment

Dark matter in the form of weakly interacting massive particles (WIMPs) is currently the favoured explanation for the universe's missing mass problem, but efforts to directly detect such particles have so far been unsuccessful. The DEAP-3600 detector was built to detect WIMPs interacting in a 1 tonne liquid argon volume. Detection relies on the bright argon scintillation response, with pulse shape discrimination as the main method of background suppression. DEAP-3600 went online last fall and over a three year livetime will probe much of the theoretically favoured region of WIMP parameter space. This talk focuses on the operation principle, current status, and future plans of DEAP.

gez. Peter Thirolf
Tel. 289-14064

gez. Norbert Kaiser
Tel. 289-12367