FAKULTÄT für PHYSIK LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT TECHNISCHE UNIVERSITÄT MÜNCHEN MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 07.11.2019, 16^{15} Uhr

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

Dr. Frank Simon

(Max-Planck-Institut für Physik, München)

Imaging Calorimeters - Concepts for Collider and Neutrino Physics

Highly granular 'imaging' calorimeters have emerged as a key technology for energy measurement and event reconstruction in collider experiments. Originally proposed and developed in the context of future linear electron-positron colliders at the energy frontier, they now find applications also in detector upgrades for the LHC experiments. In addition, this technology is also being considered for the near detector system of the DUNE long baseline neutrino experiment. In this presentation, I will discuss the evolution of silicon photomultiplier-based imaging calorimeters from the first concepts to the full technological demonstration with large prototypes, the adoption of this technology at the Large Hadron Collider, and the possibilities for applications in neutrino experiments.

gez. Peter Thirolf gez. Norbert Kaiser Tel. 289-14064 Tel. 289-12367