



Münchner Physik- Kolloquium

Winter
2017/18

Accelerating electrons with protons in plasma - the AWAKE project

Prof. Dr. Allen Caldwell, *Max-Planck-Institut für Physik, München*

Monday, 4 December 2017, 17:15 h
Hörsaal 2, Physik-Department der TUM, Garching

The construction of ever larger and costlier accelerator facilities has its limits, and new technologies will be needed to push the energy frontier. Plasma Wakefield acceleration is a rapidly developing field and is a promising candidate technology for future high-energy accelerators. The AWAKE project is pursuing an approach to accelerate an electron beam to the TeV energy regime in a single plasma section. To verify this novel technique, a proof-of-principle demonstration experiment is being carried out using 400 GeV proton beams from the Super Proton Synchrotron at CERN. First results from the experiment will be presented, as well as ideas on future applications of this technology.

Student event: Meet the speaker

We invite you to a **student-only** discussion-round with Prof. Dr. Allen Caldwell before his Munich Physics Colloquium talk.

Be curious and feel free to ask any question.

Monday, 4 December 2017, 16:00 h
Seminar room PH 3076 (upper floor), Physik-Department der TUM, James-Franck-Straße 1, Garching

