KOLLOQUIUM PHYSIK

New experimental approaches towards finding dark matter

Dr. Axel Lindner  
Deutsches Elektronen Synchrotron - DESY

Ort  
Hörsaalgebäude II
Hörsaal 2

Zeit  
16:30 Uhr

Kolloquiums-Kaffee ab 16:00 Uhr
im Raum P2-E0-414
(Alle sind herzlich eingeladen)

Im Auftrag der Dozenten  
der Fakultät Physik
Der Dekan

Einladender: Prof. Dr. Bernhard Spaan
In spite of enormous experimental and theoretical advances in the last decades the nature of dark matter remains a mystery. Simultaneously, most scientists are convinced that dark matter exists. Without it structure and evolution of the universe are hard to understand. Dark matter shall make up 85% of the total matter content of the universe.

At DESY in Hamburg new experiments are under construction or in planning to search for so-called “Weakly Interacting Slim Particles” (WISPs), like the famous axion, as dark matter candidates. Due to their very feeble interactions such WISPs cannot be found at accelerator experiments, but require new approaches. Three experiments at DESY will be based on WISP-photon oscillations, which can seemingly make light shining through walls. First results of the ALPS II experiment are expected for the year 2021.