

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Prof. Alexei Smirnov MPIK, Heidelberg

Strange effects in the neutrino oscillations

Although the neutrino oscillations are well established phenomenon, new and unusual oscillation effects in matter are still emerging. I will describe three such effects which have applications to the solar, supernova and low energy atmospheric neutrinos: (i) Parametric resonance for neutrinos propagating in a flux of background neutrinos. (ii) Oscillation waves emitted from borders between layers in a multilayer medium, like in the Earth. (iii) The attenuation effect related to the energy uncertainty in oscillation setup.

Wednesday, 12 June 2019, 16:15h, Room A348, Theresienstr. 37/III