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Change of neutrino-flavor-ratios via adiabatic conversion in asymmetrically warped extra dimensions

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Current Ice-Cube analyses show hints for an unexpected neutrino flavor ratio (1:0:0) at high energies. This may point to non-standard
neutrino properties like LSND, MiniBooNE, ractor and Gallium anomalies do, e.g. sterile neutrinos.
Here we discuss the 1+1 active-sterile neutrino mixing resulting from the altered dispersion relations of sterile neutrinos oscillating
around a 3+1 brane in an asymmetrically warped extra dimension.
In the adiabatic limit an MSW-like effect arises which drives the active neutrinos to be converted back and forth into sterile ones
resulting in an baseline dependent conversion probability and superluminal shortcuts. The change of flavor-ratios is caused
by a conversion of muon and tau neutrinos into the sterile neutrino which can not be detected. Neutrinos at lower energies will not be affected.
The conditions for this effect is calculated in dependence of vacuum-mixing-angle, mass squared difference, energy and warp factor.
Also bounds for the warp factor are shown for different considerable sterile neutrino properties to reproduce the (1:0:0) flavorratio.

Primary authors: Prof. PÄS, Heinrich (TU Dortmund); Mr SICKING, Philipp (TU Dortmund)

Presenter: Mr SICKING, Philipp (TU Dortmund)

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