THE PHYSICS COLLOQUIUM

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Bernoulliborg 5161.0253

Detecting relic neutrinos and measuring the neutrino mass with Ptolemy

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The Ptolemy experiments aims to make a first detection of the relic neutrino background which decoupled less than a second after the Big Bang by observing neutrino capture on tritium atoms. An energy resolution of the order of the neutrino mass is required to separate the neutrino capture signal from the beta decay spectrum.

I will present the Ptolemy experiment, its challenges, current status and plans as well as the prospects to make a neutrino mass measurement on the road to observation of relic neutrinos.

Join us for coffee starting 3:30 p.m. Refreshments will be served after the lecture.
For more information contact the host: Steven Jones [s.a.jones@rug.nl]
Website: http://www.rug.nl/research/vsi/colloquia/