



Irfu

Institut de recherche
sur les lois fondamentales
de l'Univers

**Séminaire
DPhP**

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CEA-Saclay Bât. 141, salle André Berthelot

First neutrino mass results from KATRIN

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The KATRIN experiment is designed to directly probe the mass of neutrinos with a sensitivity of 0.2 eV (90% CL). KATRIN offers a model-independent approach based principally on the kinematics of tritium beta decay. A non-zero neutrino mass manifests itself as a small spectral distortion close to the endpoint of the electron spectrum. In spring 2019 KATRIN carried out its first neutrino mass measurement campaign. This first dataset established new limits on neutrino mass reaching for the first time the sub-eV regime. In this presentation the operating principle of KATRIN and the first neutrino mass results will be presented.

Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Martine Oger, tél. 01 69 08 23 50, e-mail : martine.oger@cea.fr.