

## **Precise ultracold neutron spectrometry with Fabry-Perrot interferometers**

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The talk focuses on optical experiments with ultracold neutrons (UCN). The measurements were performed with an UCN gravity spectrometer using Fabry-Perrot (FP) interferometers. A short description of FP interferometers, other spectrometric multilayer structures and experimental installations will be presented.

The main results obtained with such devices are: Demonstration of UCN diffraction by a moving grating, neutron focusing in time, first observation of the accelerating medium and test of the weak equivalence principle for neutrons.