Study of the time dependence of radioactivity

Monday, 28 May 2012 12:25 (20 minutes)

In the last years many papers have been published on the time dependence of the decay constant. In particular, its annual modulation with amplitude of about 0.1% has been claimed, with the maximum in February and the minimum in August.

In the talk we will give the results of a dedicated experiment performed underground in Gran Sasso with a 137Cs source and a germanium detector. The experiment is sensitive to an effect smaller than 0.01% on the time dependence of the 137Cs decay constant.

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