



Séminaire du Laboratoire de l'Accélérateur Linéaire

Mathieu Perrin-Terrin

CERN

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Status and perspectives of the NA62 experiment at CERN

The ultra-rare kaon decay, $K^+ \rightarrow \pi^+ \nu \bar{\nu}$, is among the theoretically cleanest FCNC in the SM. Its branching fraction is a key observable to test the SM CKM structure complementary to B-physics measurements. In addition this kaon decay is extremely sensitive to possible contributions from as-yet undiscovered particles. However measuring its branching fraction, of the order of 10^{-10} in the SM and with a decay final state containing two neutrinos, is an experimental challenge. The NA62 fixed target experiment, installed at the CERN SPS, has been designed to measure this observable up to the SM prediction precision. The experiment data taking started in 2014 with a two-month pilot run and will resume this summer. We present the experiment status and perspectives in light of the 2014 data.

Auditorium Pierre Lehmann du LAL - Bât. 200, Orsay

Thé et café seront servis 5 mn avant le séminaire



Responsable : N. Delerue (seminaires@lal.in2p3.fr)- <http://www.lal.in2p3.fr>