



KCETA Colloquium

New results for searches of exotic particles with NA62 in beam-dump mode

Thursday, February 15, 2024
Kleiner Hörsaal A (CS) 15:45 - 17:00

Dr. Babette Döbrich
(MPI Munich)

We report on the search for visible decays of exotic mediators from data taken in "beam-dump" mode with the NA62 experiment. The NA62 experiment, conceived to measure the rare decay of a charged Kaon into a pion and two neutrinos, can be run as a "beam-dump experiment" by removing the Kaon production target and moving the upstream collimators into a "closed" position.

More than 10^{17} protons on target have been collected in this way during a week-long data-taking campaign by the NA62 experiment. We report on new results from analysis of this data, with a particular emphasis on Dark Photon and Axion-like particle models.

We also discuss future prospects of such physics searches with NA62 and its possible successor HIKE.



Please note:

The colloquium will also be live-streamed to Seminarraum 410 in Bld. 401 (CN).