SEMINAR ANNOUNCEMENT:

Thursday, November 23rd, 2017 – 10.30

Meeting room, INFN Labs, Area Science Park, Padriciano 99, 34149, Trieste, Italy

<u>SPEAKERS</u>: **Dr. Claudia Frugiuele** (Weizmann Institute of Science, Israel) and **Dr. Clara Peset** (Technical University of Munich, Germany)

<u>TITLE</u>: Examining muonic atoms spectroscopy as new physics probe

ABSTRACT:

We will discuss the sensitivity to new long- intermediate range interactions of precision atomic measurements.

We will explain how to exploit the experimental precision of standard atomic measurements and thus constrain new physics both using few electrons and many electrons atoms. Then we will focus on the possibilities in this direction offered by muonic atoms.

We will finally discuss the possible consequences of this result for neutrino nonstandard interactions and dark matter.

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