



*Physics Department seminar*

DIPARTIMENTO DI FISICA, VIA CELORIA 16, MILANO

**Aula A in presence and streaming**

<https://fisica-unimi.zoom.us/j/95081325770?pwd=cVhmZm1aQnk5bHZnK3BFT05DdWI5dz09>

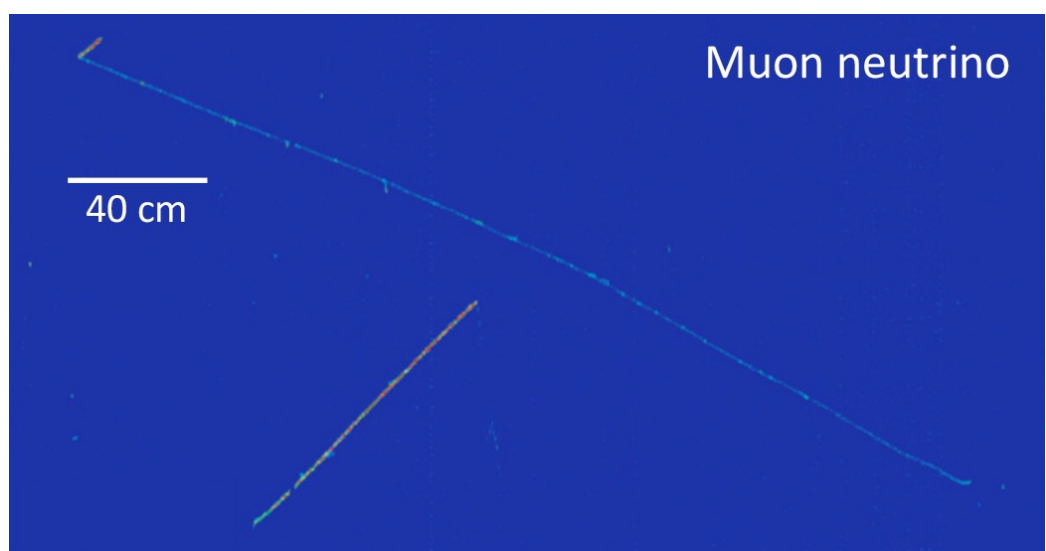
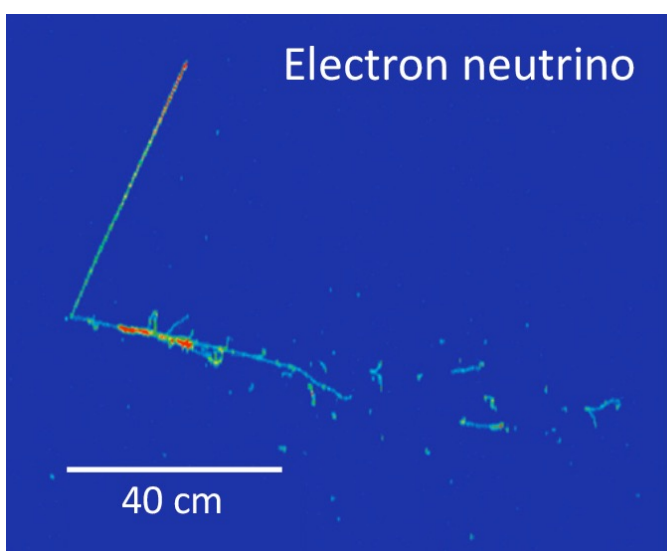
**14 Gennaio 2022– 14:30**

**CLAUDIA FRUGIUELE & PAOLA SALA**

INFN Milano

**Fast forwarding the Dark Matter hunt  
at the ICARUS neutrino fixed target experiment**

Unraveling the nature of dark matter (DM) is one of the major challenges of fundamental science today. In the recent years we understood that the current experimental program and our leading theoretical ideas are not yet sufficient to investigate deeply enough this outstanding question. It is therefore crucial to broaden the theoretical and experimental program. In particular a lot of attention has been devoted to light new physics, in the keV-GeV mass range, leading to many proposals for new experiments. Existing facilities can also play an important role fast forwarding the experimental hunt. We will discuss how neutrino fixed target experiments, in particular the Fermilab based experiment ICARUS, can play a crucial role in this quest by developing a systematic DM program completely symbiotic to the neutrino one.



Students are cordially invited – Contact [silvia.leoni@mi.infn.it](mailto:silvia.leoni@mi.infn.it)