LNGS SEMINAR SERIES

Yuri Kamyshkov

University of Tennessee, USA

- Informal seminar -

On Direct Detection of Dark Matter as Mirror Matter

- Abstract -

While supersymmetric Dark Matter (DM) candidates do not show up at LHC, the direct detection experiments DAMA/LIBRA, CoGeNT, CRESST-II, and CDMS/Si are pointing to the effects consistent with observation of light DM. Together with several other observations (to be discussed at this informal seminar) it folds naturally into other plausible scenario of DM being the Mirror Matter (MM), that predicts the spectrum of masses of DM, with major particles accessible for the direct detection being mirror hydrogen, helium, and light nuclei; and perhaps the latter are being detected in above mentioned experiments. This talk will not provide all answers to many existing questions along the MM scenario, but rather will try to outline what needs to be done in order to explore the MM scenario in terms of direct DM detection.

JUNE 23, 2014 – 11:00 AM

LNGS - "B. ROSSI" ROOM