

Avviso Di Seminario

13-05-2015, 15:00 - Aula A

Francesco Spano'

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Terra' un seminario dal titolo:

*"TOP PHYSICS AT THE LARGE HADRON COLLIDER: PAST,
PRESENT AND PERSPECTIVES ON 13 TEV COLLISIONS"*

Abstract:

The top quark is the most massive known fundamental constituent of matter. Its unexplained large mass suggests an important connection to the still mysterious electroweak symmetry breaking mechanism and it is the basis of a rich set of links to possible new particle and interactions that could appear at the LHC by often modifying the production and decay of top quarks.

Unprecedentedly abundant top quark production in proton-proton (pp) collisions at the Large Hadron Collider is opening doors on increasingly precise measurements of top quark properties, its connection to the newly discovered Higgs boson and on frontier studies on top quark-related physics beyond the standard model at new scales of energy and distance.

A pedagogical review of the most recent and significant results in top physics using data collected in the LHC pp collisions at 7 and 8 TeV center-of-mass energies (LHC Run1) will be given. Available performance and prospects studies will also be included to discuss expectations and areas of improvements for the mentioned topics in the analysis of the forthcoming data to be collected in 13 TeV LHC pp collisions starting in May 2015.

Note:

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Pasquale Lubrano