lunedì 3 dicembre, ore 14.00, si terrà in Aula Rasetti il seminario del vincitore della procedura concorsuale per RTDA Bando DD 16/2018 del 16/02/2018 SSD FIS/02 SC 02/A2

Dr. Daniele Barducci

Titolo:

New Physics in colliders, underground, in the sky: where to look for?

## Abstract:

In the coming years many ongoing and proposed experiments will investigate with unprecedented precision the intrinsic structure of the interactions between elementary particles, described with great accuracy by the Standard Model of particle physics. Intriguing hints and experimental evidences however call for an extension of this theory. I will review my resent activity on the topic of new physics beyond the Standard Model. Enphasis will be given on (composite)Higgs and Dark Matter theories related to the Naturalness problem of the Fermi scale and on the connection with current experimental activities. I will then discuss future possible research directions, which include (un)natural theories that try to address the origin of neutrino masses and baryogenesis.