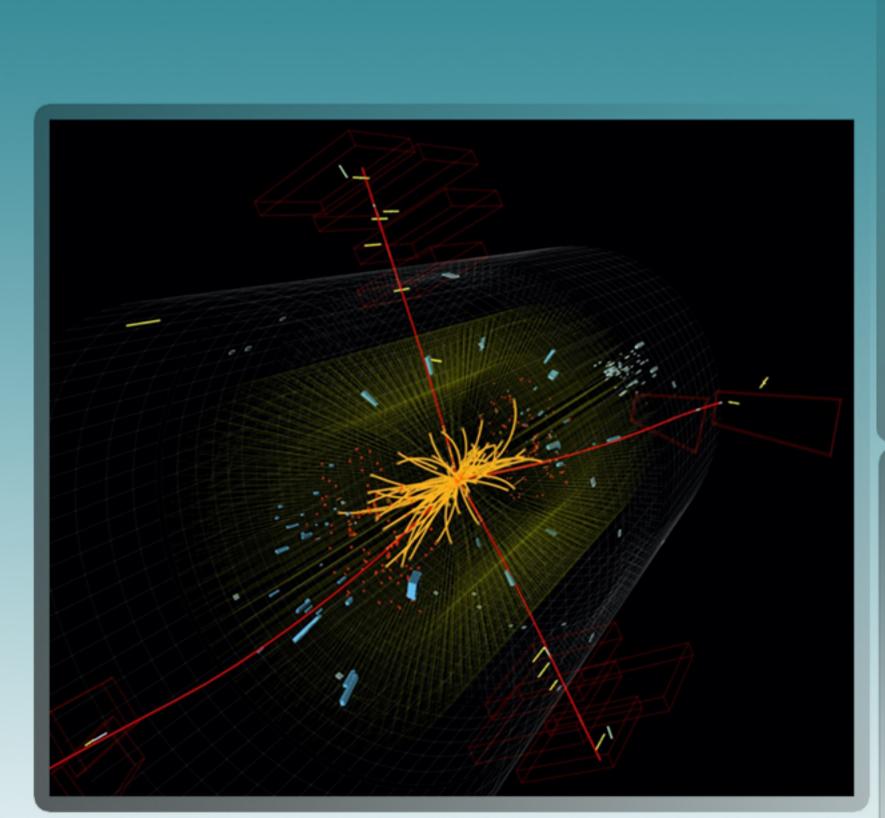
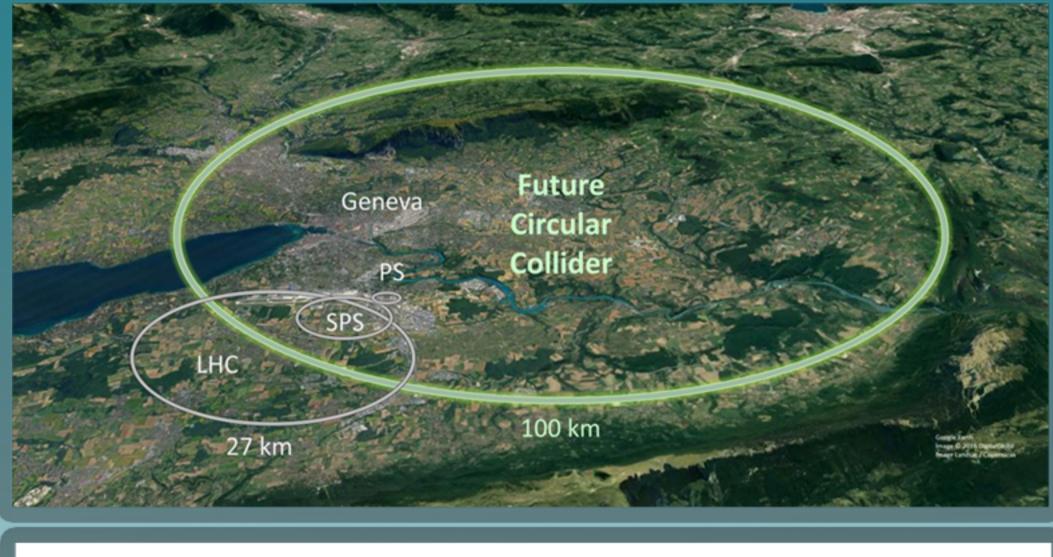




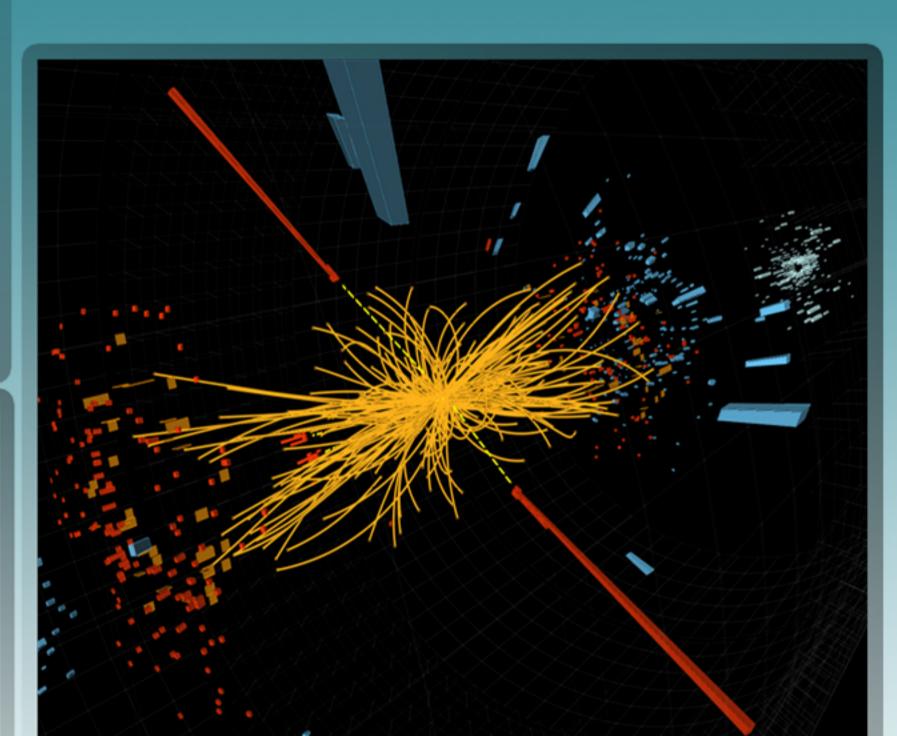
## Physics Colloquium

## The Higgs Boson Program at the LHC and Future Colliders









## Speaker: Mojtaba Mohammadi Najafabadi

School of Particles and Accelerators, IPM

## Abstract:

The future programs of the particle physics are quite attached to the Higgs boson measurements as its properties are related to several of the open fundamental questions in particle physics. In this talk, we introduce the future collider experiments and their capabilities in measuring the properties of Higgs boson and its close relative top quark. We also discuss the proposed future colliders are significantly more sensitive to beyond the Standard Model physics than the High-Luminosity LHC alone.



M. Mohammadi Najafabadi is a professor of physics at the School of Particles and Accelerators (IPM). He received his Ph.D. in 2007 at Sharif University of Technology in collaboration with CERN (Switzerland) and, after completing his postdoctoral tenure at IPM, continued his work at IPM as a faculty member. He is currently the head of the School

of Particles and Accelerators and IPM's coordinator for the CMS/CERN collaboration. His research interests include the physics of top quark and Higgs boson as well as the Standard Model Effective Field Theory. His recent achievements include the discovery of the first evidence for the production of a top quark associated with a photon at the LHC with the CMS experiment data published in Physical Review Letters and highlighted by CERN Courier in 2018.

Date: Wed, 20 November 2019

Time: 04:00 PM

Place: Conference Hall, Farmanieh

Bldg (1st floor), IPM



Address: No. 70, Lavasani St., Institute for Research in Fundamental Sciences (IPM), Tehran