

# Measuring the HIGGS Properties at LHC and Beyond

*Tuesday, June 11, 2019 9:00 AM (40 minutes)*

Many key parameters of the Standard Model are strictly connected to the Higgs boson properties. The precision measurement of these quantities is an important result in itself and would constitute a major physics goal of the CMS experiment at LHC. In addition, any anomaly with respect to the Standard Model predictions would be indirect evidence of new physics and could hint at the energy scale at which new particles or new interactions may appear.

The talk will present the current status of the most important studies in this area and will describe in detail plans and challenges of the next data taking period, Run 3, in preparation for the High Luminosity phase of LHC (HL-LHC). Lastly, the prospects for the measurements of Higgs properties at future linear and circular colliders will be discussed.

**Presenters:** TONELLI, Guido Emilio (INFN Sezione di Pisa, Universita' e Scuola Normale Superiore, P); TONELLI, Guido (Universita degli Studi di Pisa-INFN, Sezione di Pisa-Unknown)