

Contribution ID: 207 Type: Talk

Future physics with CMS

Tuesday, 8 September 2020 08:30 (30 minutes)

The CMS Collaboration continues to work actively on developing the physics program for the High-Luminosity LHC (HL-LHC).

The HL-LHC will extend the LHC program to the second half of the 2030's with pp collisions at 14 TeV with an integrated luminosity

of 3 ${\rm ab}^{-1}$ each for ATLAS and CMS experiments, and PbPb and pPb collisions with integrated luminosities of 13 ${\rm nb}^{-1}$ and 50 ${\rm nb}^{-1}$,

respectively.

A factor of ten increase in the integrated luminosity compare to the initial LHC program, and new and improved detector components,

open the door for refined studies

of the properties of the Higgs boson, including its self-coupling,

allow precision measurements of standard-model process, and further investigations of the flavor sector and the quark-gluon plasma.

The CMS physics projects for the HL-LHC are discussed.

Is this abstract from experiment?

Yes

Internet talk

Yes

Name of experiment and experimental site

CMS

Is the speaker for that presentation defined?

Yes

Details

Alexander Savin, University of Wisconsin, Madison, USA

Primary author: SAVIN, Alexander (University of Wisconsin Madison (US))

Presenter: SAVIN, Alexander (University of Wisconsin Madison (US))

Session Classification: Plenary