Contribution ID: **19** Type: **Poster Presentation**

The upgrade of the muon system of the CMS experiment

Thursday, 11 September 2014 14:00 (1h 40m)

The CMS muon system is based on three types of gaseous detectors, RPC, CSC and DT. While operating very well in the present conditions, upgrades are foreseen for each of the subsystems, necessary to cope with the increased pile-up, coming along with higher rates and radiation, during the upcoming periods of data taking.

Moreover, an important issue will be to make the system able to perform its delicate task of muon triggering and tracking also in the High Luminosity phase of LHC, foreseen to start after Long Shutdown 3 in 2023 and to last for about 10 years.

Studies devoted to asses the system perfomance stability for the future will be presented. In addition, the stategy - which is being developed - to complement the existing system with new detectors, based on GEM or improved RPC technologies, will be shown.

Primary author: ABBRESCIA, Marcello (Universita e INFN (IT))

Presenter: ABBRESCIA, Marcello (Universita e INFN (IT))

Session Classification: Session 13: Posters 2 (Astrophysics, Synchroton and other Applications)

Track Classification: Gas-based detection methods