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## The CMS GE1/1 commissioning and alignment status

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The CMS muon system plays an important role in the discovery of new physics like the Higgs boson and new particles. The next phase of the LHC is planned to increase luminosity to improve the discovery power. The high luminosity LHC (HL-LHC) will be a harsh environment of pp collisions and will require high-performance muon trigger and muon track reconstruction, especially in the endcap region. In order to maintain the performance of the CMS muon system, the CMS collaboration has been developing a Gas Electron Multiplier (GEM) detector for the endcap regions of the CMS muon system. The new sub-detector system requires a new procedure of commissioning and alignment to be developed. We report the status of the GE1/1 commissioning and alignment.

## Are you are a member of the APS Division of Particles and Fields?

Yes

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