

Abstract Submitted
for the APR21 Meeting of
The American Physical Society

The CMS GEM Commissioning and Alignment Status HYUNY-
ONG KIM, Texas AM University, CMS COLLABORATION — 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 trig-
ger 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 GEM
commissioning and alignment.

Hyunyong Kim
Texas A
M University

Date submitted: 11 Jan 2021

Electronic form version 1.4