

# Status of the CMS High Precision Spectrometer Project

*Saturday, 15 September 2012 10:00 (10 minutes)*

## Summary

We have proposed to add proton detectors at  $\pm 240\text{m}$ , and later  $\pm 420\text{m}$ , with high precision silicon tracking (1 $\mu\text{rad}$  in angle) to measure the momenta of leading protons in central exclusive production:  $p + X + p$ . In Stage 1 (240m) X can be a W-pair, a jet-pair or (e.g) a high mass MSSM Higgs. In Stage 2 (420m) X can be a H(125) produced with no other particles, and its properties can be measured in a unique way. High pile-up background will be reduced by kinematics and precision timing (10ps). We hope for approval this year for installation of Stage 1 in 2014 (LS1).

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