



Precision electromagnetic calorimetry at the energy frontier: The CMS ECAL at the LHC Run 2

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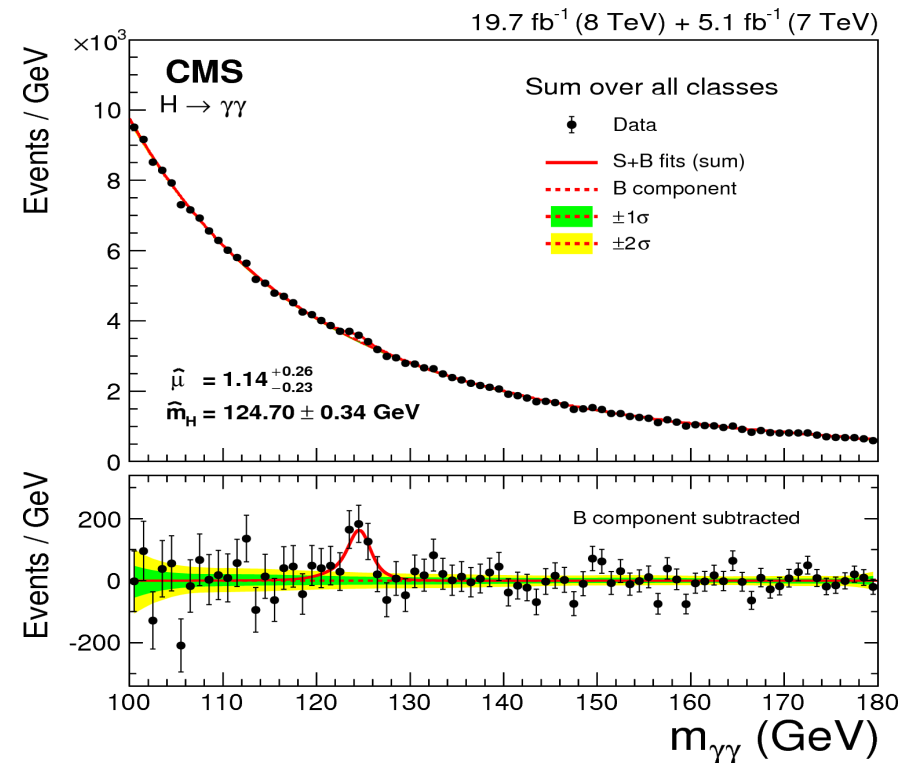
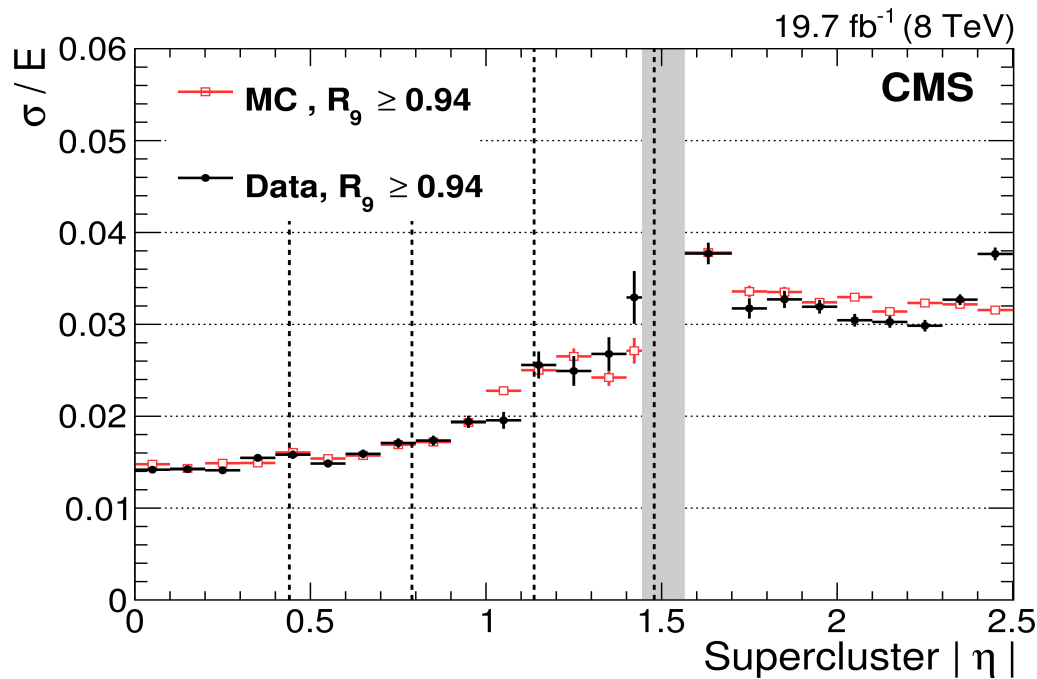
INFN and University of Milano-Bicocca

Physics Slam: EPS 2015, 27/07/2015



Introduction

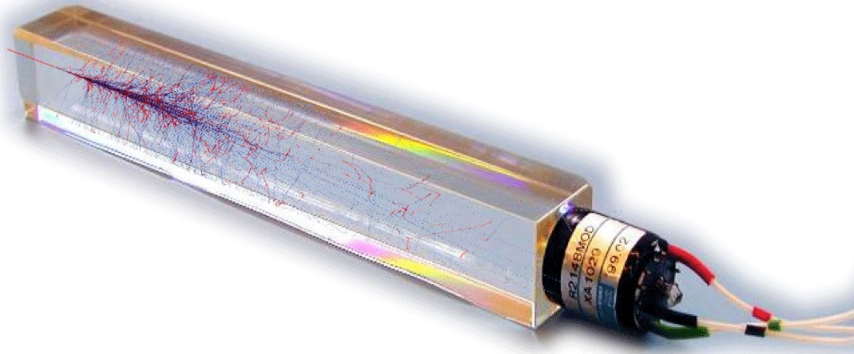
- The CMS electromagnetic calorimeter is at the forefront of the search for new physics and precision measurements
- Run I: successful Higgs boson discovery via the diphoton decays due to excellent performance



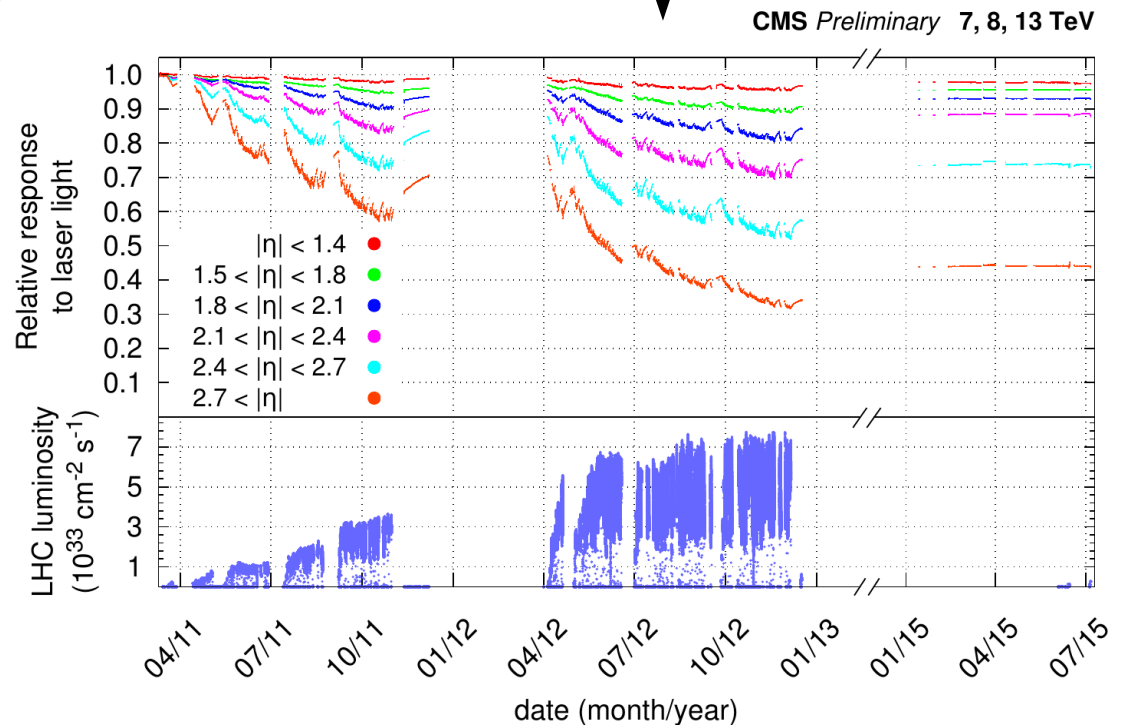
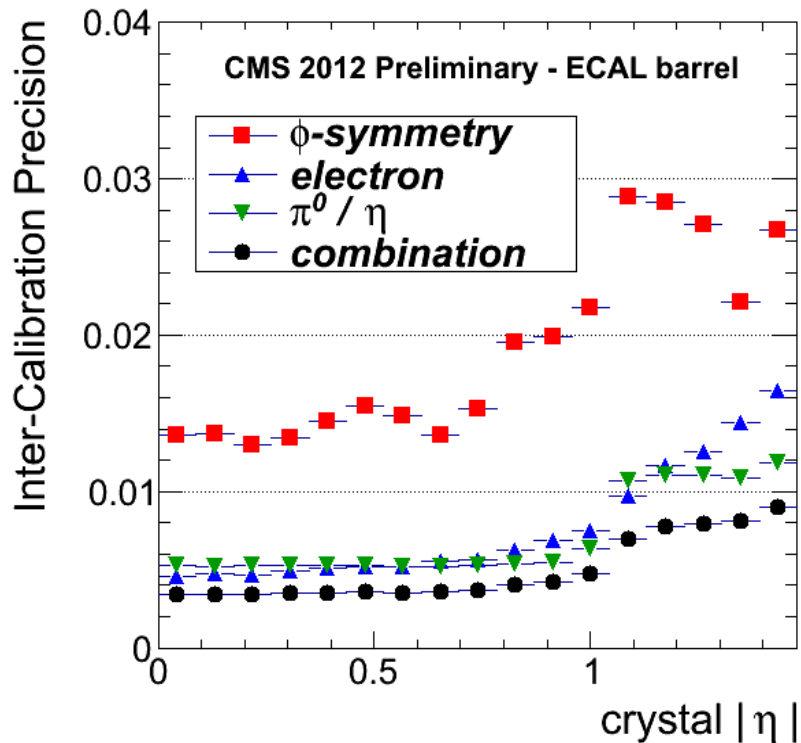


Energy Calibration

- 75848 PbWO_4 crystals
- High granularity and compact calorimeter



$$E_{e,\gamma} = F_{e,\gamma} \left[G \times \sum_i (C_i \times S_i(t) \times \mathcal{A}_i + E_{ES}) \right]$$



→ Calibration procedure similar to Run I is being used, aiming to similar performance

The best has yet to come...

...and check the poster for more details!!!

