

Curriculum Vitae : Morgan LETHUILLIER Institut de physique nucléaire de Lyon (IPNL) / Université Claude Bernard Lyon 1

Ph.D 1999, Spp / CEA Saclay and Université Paris 7. CNRS Chargé de recherche Class 2, 1999, Institut de Physique Nucléaire de Lyon. Promoted to Class 1, 2003.

Research Experience: Lengthy experience in experimental accelerator-based particle physics: Calorimetry R & D, Higgs boson, supersymmetry and beyond-the-Standard-Model searches at LEP (Delphi experiment) and LHC (CMS experiment)

Current Research Interests: SM and BSM Higgs boson searches and property measurements in the H $\rightarrow\gamma\gamma$ decay channel.

Scientific Responsibilities:

• Co-convenor, CMS Ecal Prompt Feedback Group 2011-2012

Most significant publications since 2015 :

(813 citeable papers since 1999, h-index: 125 on Inspire)

- CMS Collaboration, "Search for new resonances in the diphoton final state in the mass range between 70 and 110 GeV in pp collisions at √s=8 and 13 TeV", CMS-PAS-HIG-17-013.
- G.~Cacciapaglia, A.~Deandrea, S.~Gascon-Shotkin, S.~Le Corre, M.~Lethuillier and J.~Tao, *"Search for a lighter Higgs boson in Two Higgs Doublet Models"*, JHEP **1612** (2016) 068
- CMS Collaboration, "Search for new resonances in the diphoton final state in the mass range between 80 and 110 GeV in pp collisions at √s =8 TeV", CMS-PAS-HIG-14-037.
- CMS Collaboration, "Measurements of properties of the Higgs boson in the diphoton decay channel with the full 2016 data set", CMS-PAS-HIG-16-040.
- CMS Collaboration, "Updated measurements of Higgs boson production in the diphoton decay channel at √s =13 TeV in pp collisions at CMS", CMS-PAS-HIG-16-020.

- CMS Collaboration, "First measurements of the Higgs boson production in the diphoton decay channel at $\sqrt{s} = 13$ TeV", **CMS-PAS-HIG-15-005**.
- ATLAS and CMS Collaborations, "Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at $\sqrt{s} = 7$ and 8 TeV", JHEP **1608** (2016) 045.
- ATLAS and CMS Collaborations, "Combined Measurement of the Higgs Boson Mass in pp collisions at √s =7 and 8 TeV with the ATLAS and CMS Experiments", Phys. Rev. Lett. **114** (2015) 191803.
- CMS Collaboration, "Performance of Photon Reconstruction and Identification with the CMS Detector in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV", JINST **10** (2015) no.08, P08010.
- CMS Collaboration, "Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at √s =7 and 8 TeV", Eur. Phys. J. C 75 (2015) no.5, 212.