- Conference for Computing in High-Energy and Nuclear Physics (CHEP03), 2003, CHEP-2003-MOLT007, arXiv: physics/0306116.
- [28] L. Moneta, K. Belasco, K. S. Cranmer, A. Lazzaro, D. Piparo, G. Schott, W. Verkerke, and M. Wolf, The Roostats Project, in Proceedings of the 13th International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT2010) (SISSA, 2010), Proc. Sci., ACAT2010 (2010) 057 [arXiv:1009.1003].
- [29] K. Cranmer, G. Lewis, L. Moneta, A. Shibata, and W. Verkerke (ROOT), "HISTFACTORY: A tool for creating statistical models for use with ROOFIT and ROOSTATS," Tech. Rep. CERN-OPEN-2012-016, 2012 (http://cds.cern.ch/record/1456844).
- [30] ATLAS Collaboration, Electron and photon energy calibration with the ATLAS detector using LHC Run 1 data, Eur. Phys. J. C 74, 3071 (2014).
- [31] ATLAS Collaboration, Measurement of the muon reconstruction performance of the ATLAS detector using 2011 and 2012 LHC proton-proton collision data, Eur. Phys. J. C 74, 3130 (2014).
- [32] CMS Collaboration, Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV, J. Instrum. 7, P10002 (2012).
- [33] CMS Collaboration, Performance of electron reconstruction and selection with the CMS detector in proton-proton

- collisions at $\sqrt{s} = 8$ TeV, arXiv:1502.02701 [J. Instrum. (to be published)].
- [34] CMS Collaboration, Performance of photon reconstruction and identification with the CMS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV, arXiv:1502.02702.
- [35] P.D. Dauncey, M. Kenzie, N. Wardle, and G.J. Davies, Handling uncertainties in background shapes: The discrete profiling method, J. Instrum. **10**, P04015 (2015).
- [36] ALEPH, DELPHI, L3, OPAL, SLD Collaborations, LEP Electroweak Working Group, and SLD Electroweak and Heavy Flavour Groups, Precision electroweak measurements on the Z resonance, Phys. Rep. 427, 257 (2006).
- [37] ATLAS Collaboration, Observation and measurement of Higgs boson decays to *WW** with the ATLAS detector, arXiv:1412.2641 [Phys. Rev. D (to be published)].
- [38] ATLAS Collaboration, Evidence for the Higgs-boson Yukawa coupling to tau leptons with the ATLAS detector, J. High Energy Phys. 04 (2015) 117.
- [39] CMS Collaboration, Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states, J. High Energy Phys. 01 (2014) 096.
- [40] CMS Collaboration, Evidence for the 125 GeV Higgs boson decaying to a pair of τ leptons, J. High Energy Phys. 05 (2014) 104.

G. Aad, ^{85,†} B. Abbott, ^{113,†} J. Abdallah, ^{151,†} O. Abdinov, ^{11,†} R. Aben, ^{107,†} M. Abolins, ^{90,†} O. S. AbouZeid, ^{158,†} H. Abramowicz, ^{153,†} H. Abreu, ^{152,†} R. Abreu, ^{30,†} Y. Abulaiti, ^{146a,146b,†} B. S. Acharya, ^{164a,164b,b,†} L. Adamczyk, ^{38a,†} D. L. Adams, ^{25,†} J. Adelman, ^{108,†} S. Adomeit, ^{100,†} T. Adye, ^{131,†} A. A. Affolder, ^{74,†} T. Agatonovic-Jovin, ^{13,†} J. A. Aguilar-Saavedra, ^{126a,126f,†} S. P. Ahlen, ^{22,†} F. Ahmadov, ^{65,c,†} G. Aielli, ^{133a,133b,†} H. Akerstedt, ^{146a,146b,†} T. P. A. Åkesson, ^{81,†} G. Akimoto, ^{155,†} A. V. Akimov, ^{96,†} G. L. Alberghi, ^{20a,20b,†} J. Albert, ^{169,†} S. Albrand, ^{55,†} M. J. Alconada Verzini, ^{71,†} M. Aleksa, ^{30,†} I. N. Aleksandrov, ^{65,†} C. Alexa, ^{26a,†} G. Alexander, ^{153,†} T. Alexopoulos, ^{10,†} M. Alhroob, ^{13,†} G. Alimonti, ^{91a,†} L. Alio, ^{85,†} J. Alison, ^{31,†} S. P. Alkire, ^{35,†} B. M. M. Allbrooke, ^{18,†} P. P. Allport, ^{74,†} A. Aloisso, ^{104a,104b,†} A. Alonso, ^{36,†} F. Alonso, ^{71,†} C. Alpigiani, ^{76,†} A. Altheimer, ^{35,†} B. Alvarez Gonzalez, ^{30,†} D. Álvarez Piqueras, ^{167,†} M. G. Alviggi, ^{104a,104b,†} B. T. Amadio, ^{15,†} K. Amako, ^{66,†} Y. Amaral Coutinho, ^{24a,†} C. Amelung, ^{23,†} D. Amidei, ^{89,†} S. P. Amor Dos Santos, ^{126a,126c,†} A. Amorim, ^{126a,126b,†} S. Amoroso, ^{48,†} N. Amram, ^{153,†} G. Amundsen, ^{23,†} C. Anastopoulos, ^{139,†} L. S. Ancu, ^{49,†} N. Andrai, ^{30,†} T. Andeen, ^{35,†} C. F. Anders, ^{58h,†} G. Anders, ^{30,†} J. K. Anders, ^{74,†} F. Anghinolf, ^{30,†} A. V. Anisenkov, ^{109,4†} N. Anjos, ^{12,‡} A. Annovi, ^{124a,124b,†} M. Antonelli, ^{47,†} A. Antonov, ^{88,†} J. Antos, ^{44b,†} F. Anglinolf, ^{30,†} A. V. Anisenkov, ^{109,4†} N. Anjos, ^{12,†} A. Annovi, ^{124a,124b,†} M. Antonelli, ^{47,†} A. Antonov, ^{88,†} J. Antos, ^{48,†} M. Arratia, ^{28,†} O. Arslan, ^{21,†} A. Aramonov, ^{97,†} G. Artoni, ^{23,†} S. Asai, ^{155,†} N. Asbah, ^{22,†} A. Ashkenazi, ^{153,†} B. Asman, ^{146a,146b,†} L. Asquith, ^{149,†} K. Assamagan, ^{25,†} R. Astalos, ^{144a,†} M. Atkinson, ^{165,†} N. Barkov, ^{48,†}