Publications

As of March 2024, my **h-index is ca. 150**. The following list contains **only my most important publications**. For a **full list** of my publications, see Google Scholar: https://scholar.google.com/citations?user=ZgO3g3QAAAAJ.

Artificial Intelligence and Deep Learning

Journal publications, conference papers, proceedings, others

- P. Denzel, S. Brunner, Y. Billeter, O. Forster, C. Frischknecht-Gruber, M. Reif, F.-P. Schilling, J. Weng, R. Chavarriaga, A. Amini, M. Repetto, and A. Iranfar, "Towards the Certification of Al-based Systems," in SDS 2024: 11th IEEE Swiss Conference on Data Science, 2024
- Y. Billeter, P. Denzel, R. Chavarriaga, O. Forster, F.-P. Schilling, S. Brunner, C. Frischknecht-Gruber, M. Reif, and J. Weng, "MLOps as Enabler of Trustworthy AI," in SDS 2024: 11th IEEE Swiss Conference on Data Science, 2024
- 3. Y. Billeter, S. Brunner, R. Chavarriaga, P. Denzel, O. Forster, C. M.-L. Frischknecht-Gruber, M. Reif, F.-P. Schilling, J. Weng, A. Iranfar, and M. Repetto, "Certification Scheme For Artificial Intelligence Based Systems," in *ESREL 2024: Advances in Reliability, Safety and Security*, 2024
- 4. M. Amirian, D. Barco, I. Herzig, and F.-P. Schilling, "Artifact Reduction in 3D and 4D Cone-beam Computed Tomography Images with Deep Learning A Review," *IEEE Access*, vol. 12, pp. 10281–10295, 2024. doi: 10.1109/ACCESS.2024.3353195
- P. Denzel, S. Brunner, P.-P. Luley, C. Frischknecht-Gruber, M. U. Reif, F.-P. Schilling, A. Amini, M. Repetto, A. Iranfar, J. Weng, and R. Chavarriaga, "A framework for assessing and certifying explainability of health-oriented AI systems," in *Explainable AI in Medicine Workshop, Lugano, Switzerland, November 2023*, 2023. [Online]. Available: https://digitalcollection.zhaw.ch/handle/11475/29258
- 6. P. Denzel, F.-P. Schilling, and E. Gavagnin, "Map-to-map translation for SKA mock observations and cosmological simulations," in *Hammers and Nails 2023 Swiss Edition, Ascona, Switzerland, October 2023*, 2023. doi: 10.21256/zhaw-29047
- 7. M. Amirian, J. A. Montoya-Zegarra, I. Herzig, P. E. Hotz, L. Lichtensteiger, M. Morf, A. Züst, P. Paysan, I. Peterlik, S. Scheib, R. M. Füchslin, T. Stadelmann, and F.-P. Schilling, "Mitigation of motion-induced artefacts in Cone Beam Computed Tomography using Deep Convolutional Neural Networks," *Med. Phys.*, vol. 50, no. 10, pp. 6228–6242, 2023. doi: 10.1002/mp.16405
- 8. J. Weng, M. Reif, R. Chavarriaga, and F.-P. Schilling, "certAlnty: a certification scheme for Al systems," in *Poster presented at ZHAW Datalab Symposium, Winterthur, Switzerland*, 2023. doi: 10.21256/zhaw-27261
- 9. P. Denzel, E. Gavagnin, and F.-P. Schilling, "Deep learning the SKA: the Square Kilometer Array project," in *Poster presented at ZHAW Datalab Symposium, Winterthur, Switzerland*, 2023. doi: 10.21256/zhaw-27219
- F.-P. Schilling, D. Flumini, R. M. Füchslin, E. Gavagnin, A. Geller, S. Quarteroni, and T. Stadelmann, "Foundations of Data Science: A Comprehensive Overview Formed at the 1st International Symposium on the Science of Data Science," *Archives of Data Science, Series A*, vol. 8, no. 2, pp. 1 20, 2022. doi: 10.5445/IR/1000146422

I. Herzig, P. Paysan, S. Scheib, F.-P. Schilling, J. Montoya, M. Amirian, T. Stadelmann, P. Eggenberger, R. M. Füchslin, and L. Lichtensteiger, "Deep Learning-Based Simultaneous Multi-Phase Deformable Image Registration of Sparse 4D-CBCT," in *Proceedings of the American Association of Physics in Medicine Annual Meeting (AAPM 2022)*, 2022. doi: 10.21256/zhaw-25181 Washington, DC, USA, July 2022

- 12. T. Stadelmann and F.-P. Schilling, Eds., Advances in Deep Neural Networks for Visual Pattern Recognition. MDPI, 2022, Special issue of J. Imaging (ISSN 2313-433X). [Online]. Available: https://www.mdpi.com/journal/jimaging/special_issues/deep_neural_network
- 13. N. Simmler, P. Sager, P. Andermatt, R. Chavarriaga, F.-P. Schilling, M. Rosenthal, and T. Stadelmann, "A survey of un-, weakly-, and semi-supervised learning methods for noisy, missing and partial labels in industrial vision applications," in 8th Swiss Conference on Data Science (SDS), 2021. doi: 10.1109/SDS51136.2021.00012 pp. 26–31
- 14. F.-P. Schilling and T. Stadelmann, Eds., *Artificial Neural Networks in Pattern Recognition*. MDPI, 2020, Special issue of Computers (ISSN 2073-431X). [Online]. Available: https://www.mdpi.com/journal/computers/special_issues/ANNPR2020
- 15. L. Tuggener, M. Amirian, F. Benites, P. von Däniken, P. Gupta, F.-P. Schilling, and T. Stadelmann, "Design Patterns for Resource-Constrained Automated Deep-Learning Methods," *AI*, vol. 1, no. 4, pp. 510–538, 2020. doi: 10.3390/ai1040031
- F.-P. Schilling and T. Stadelmann, Eds., Artificial neural networks in pattern recognition: Proceedings of the 9th IAPR TC3 workshop, ANNPR 2020, Winterthur, Switzerland, September 2-4, 2020, vol. Lecture Notes in Computer Science, no. 12294. Springer, 2020. doi: 10.1007/978-3-030-58309-5
- 17. M. Amirian, L. Tuggener, R. Chavarriaga, Y. P. Satyawan, F.-P. Schilling, F. Schwenker, and T. Stadelmann, "Two to trust: Automl for safe modelling and interpretable deep learning for robustness," *Proc. of the 1st TAILOR Workshop on Trustworthy AI at ECAI 2020*, 2020. doi: 10.21256/zhaw-22061
- 18. M. Amirian, K. Rombach, L. Tuggener, F.-P. Schilling, and T. Stadelmann, "Efficient deep cnns for cross-modal automated computer vision under time and space constraints," *Proc. of ECML-PKDD 2019, Würzburg*, 2019. doi: 10.21256/zhaw-18357
- 19. F.-P. Schilling and T. Stadelmann, "Deep Learning in medizinischer Diagnostik und Qualitäts-kontrolle," *Netzwoche, Special Issue: IT for Health*, 2019. doi: 10.21256/zhaw-20163

Particle Physics

Journal Publications

- 20. S. Chatrchyan *et al.*, "Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s}=8$ TeV," *Phys. Lett. B*, vol. 770, pp. 50–71, 2017. doi: 10.1016/j.physletb.2017.04.028
- 21. S. Chatrchyan *et al.*, "Evidence for the direct decay of the 125 GeV Higgs boson to fermions," *Nature Phys.*, vol. 10, p. 557, 2014. doi: 10.1038/nphys3005
- 22. S. Chatrchyan *et al.*, "Search for the standard model Higgs boson produced in association with a W or a Z boson and decaying to bottom quarks," *Phys. Rev.*, vol. D89, p. 012003, 2014. doi: 10.1103/PhysRevD.89.012003
- 23. S. Chatrchyan *et al.*, "Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s} = 7$ and 8 TeV," *JHEP*, vol. 1306, p. 081, 2013. doi: 10.1007/JHEP06(2013)081

24. S. Chatrchyan *et al.*, "A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider," *Science*, vol. 338, p. 1569, 2012. doi: 10.1126/science.1230816

- 25. S. Chatrchyan *et al.*, "Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC," *Phys.Lett.*, vol. B716, pp. 30–61, 2012. doi: 10.1016/j.physletb.2012.08.021
- 26. F.-P. Schilling, "Top Quark Physics at the LHC: A Review of the First Two Years," *Int. J. Mod. Phys.*, vol. A27, no. 17, p. 1230016, 2012. doi: 10.1142/s0217751x12300165
- 27. S. Chatrchyan *et al.*, "Measurement of the single-top-quark t-channel cross section in pp collisions at $\sqrt{s}=7$ TeV," *JHEP*, vol. 1212, p. 035, 2012. doi: $10.1007/\mathrm{JHEP12}(2012)035$
- 28. S. Chatrchyan *et al.*, "Inclusive and differential measurements of the $t\bar{t}$ charge asymmetry in proton-proton collisions at 7 TeV," *Phys.Lett.*, vol. B717, pp. 129–150, 2012. doi: 10.1016/j.physletb.2012.09.028
- 29. S. Chatrchyan *et al.*, "Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at sqrt(s) = 7 TeV," *Phys.Lett.*, vol. B709, pp. 28–49, 2012. doi: 10.1016/j.physletb.2012.01.078
- 30. S. Chatrchyan et al., "Measurement of the $t\bar{t}$ Production Cross Section in pp Collisions at 7 TeV in Lepton + Jets Events Using b-quark Jet Identification," *Phys.Rev.*, vol. D84, p. 092004, 2011. doi: 10.1103/PhysRevD.84.092004
- 31. S. Chatrchyan *et al.*, "Measurement of the t-channel single top quark production cross section in pp collisions at sqrt(s) = 7 TeV," *Phys.Rev.Lett.*, vol. 107, p. 091802, 2011. doi: 10.1103/Phys-RevLett.107.091802
- 32. S. Chatrchyan *et al.*, "Measurement of the t t-bar production cross section and the top quark mass in the dilepton channel in pp collisions at sqrt(s) =7 TeV," *JHEP*, vol. 07, p. 049, 2011. doi: 10.1007/JHEP07(2011)049
- 33. S. Chatrchyan *et al.*, "Measurement of the Top-antitop Production Cross Section in pp Collisions at sqrt(s)=7 TeV using the Kinematic Properties of Events with Leptons and Jets," *Eur. Phys. J.*, vol. C71, p. 1721, 2011. doi: 10.1140/epjc/s10052-011-1721-3
- 34. V. Khachatryan *et al.*, "First Measurement of the Cross Section for Top-Quark Pair Production in Proton-Proton Collisions at $\sqrt{s}=7$ TeV," *Phys.Lett.*, vol. B695, pp. 424–443, 2011. doi: 10.1016/j.physletb.2010.11.058
- 35. S. Chatrchyan *et al.*, "Alignment of the CMS Silicon Tracker during Commissioning with Cosmic Rays," *JINST*, vol. 5, p. T03009, 2010. doi: 10.1088/1748-0221/5/03/T03009
- 36. S. Chatrchyan *et al.*, "Alignment of the CMS Silicon Strip Tracker during standalone Commissioning," *JINST*, vol. 4, p. T07001, 2009. doi: 10.1088/1748-0221/4/07/T07001
- 37. W. Adam *et al.*, "The CMS tracker operation and performance at the Magnet Test and Cosmic Challenge," *JINST*, vol. 3, p. P07006, 2008. doi: 10.1088/1748-0221/3/07/P07006
- 38. R. Adolphi *et al.*, "The CMS experiment at the CERN LHC," *JINST*, vol. 3, p. S08004, 2008. doi: 10.1088/1748-0221/3/08/S08004
- 39. G. Bayatian *et al.*, "CMS technical design report, volume II: Physics performance," *J. Phys.*, vol. G34, pp. 995–1579, 2007. doi: 10.1088/0954-3899/34/6/S01
- 40. V. Karimaki, T. Lampen, and F.-P. Schilling, "Track-based alignment of composite detector structures," *IEEE Trans. Nucl. Sci.*, vol. 53, pp. 3830–3833, 2006. doi: 10.1109/TNS.2006.884384

41. A. Aktas *et al.*, "Measurement and QCD analysis of the diffractive deep- inelastic scattering cross-section at HERA," *Eur. Phys. J.*, vol. C48, pp. 715–748, 2006. doi: 10.1140/epjc/s10052-006-0035-3

- 42. A. Aktas *et al.*, "Diffractive deep-inelastic scattering with a leading proton at HERA," *Eur. Phys. J.*, vol. C48, pp. 749–766, 2006. doi: 10.1140/epjc/s10052-006-0046-0
- 43. C. Adloff *et al.*, "Measurement of inclusive jet cross-sections in photoproduction at HERA," *Eur. Phys. J.*, vol. C29, pp. 497–513, 2003. doi: 10.1140/epjc/s2003-01262-9
- 44. A. Aktas *et al.*, "Diffractive photoproduction of J/ψ mesons with large momentum transfer at HERA," *Phys. Lett.*, vol. B568, pp. 205–218, 2003. doi: 10.1016/j.physletb.2003.06.056
- 45. C. Adloff *et al.*, "Search for odderon-induced contributions to exclusive pi0 photoproduction at HERA," *Phys. Lett.*, vol. B544, pp. 35–43, 2002. doi: 10.1016/S0370-2693(02)02479-6
- 46. C. Adloff *et al.*, "A measurement of the t dependence of the helicity structure of diffractive rho meson electroproduction at HERA," *Phys. Lett.*, vol. B539, pp. 25–39, 2002. doi: 10.1016/S0370-2693(02)02035-X
- 47. C. Adloff *et al.*, "Energy flow and rapidity gaps between jets in photoproduction at HERA," *Eur. Phys. J.*, vol. C24, pp. 517–527, 2002. doi: 10.1007/s10052-002-0988-9
- 48. C. Adloff *et al.*, "Diffractive jet production in deep inelastic e^+p collisions at HERA," *Eur. Phys. J.*, vol. C20, pp. 29–49, 2001. doi: 10.1007/s100520100634

Proceedings

- 49. F.-P. Schilling, "Measurements of the Top Quark Pair-Production Cross Section," in *23rd Hadron Collider Physics Symposium, Kyoto, Japan*, vol. 49, 2013. doi: 10.1051/epjconf/20134904001 p. 04001
- 50. F.-P. Schilling, "Top Quark Studies with the first CMS Data," in *21st Hadron Collider Physics Symposium, Toronto, Canada*, 2010. doi: 10.48550/arXiv.1010.2393
- 51. J. Campbell, J. Huston, P. Nadolsky, F.-P. Schilling, P. Uwer, and J. Weng, "Common Ntuple Output format for NLO Calculations," in *9th Workshop on Physics at TeV Colliders, Les Houches, France*, 2009. doi: 10.48550/arXiv.1003.1241
- 52. F.-P. Schilling, "QCD and Top Quark Physics at the LHC," in 4th Intl. Conference on Physics at the LHC, Split, Croatia, vol. LHC2008, 2008. doi: 10.22323/1.055.0047 p. 047
- 53. F.-P. Schilling, "Early Electroweak and Top Quark Physics with CMS," in *15th Intl. Workshop on Deep-Inelastic Scattering and Related Subjects (DIS2007), Munich, Germany*, 2007. doi: 10.3204/proc07-01/61 pp. 447-450
- 54. F.-P. Schilling, "Track Based Alignment in CMS," in 1st LHC Detector Alignment Workshop, Geneva, Switzerland, 2007. doi: 10.5170/CERN-2007-004.181
- 55. P. Arce, O. Buchmuller, F. P. Schilling, I. Vila, and M. Weber, "Introduction to the CMS contribution," in *1st LHC Detector Alignment Workshop, Geneva, Switzerland*, 2007. doi: 10.5170/CERN-2007-004.173
- 56. O. Buchmuller and F. P. Schilling, "Status and commissioning of the CMS experiment," in *BEAUTY* 2006, Oxford, UK, vol. 170, 2007. doi: 10.1016/j.nuclphysbps.2007.05.029 pp. 264–272

57. F.-P. Schilling, "Track reconstruction and alignment with the CMS silicon tracker," in *33rd Intl. Conference on High Energy Physics (ICHEP 2006)*, *Moscow, Russia*, 2006. doi: 10.48550/arXiv.physics/0610005

- 58. L. Barbone *et al.*, "Impact of CMS silicon tracker misalignment on track and vertex reconstruction," in *Workshop on Tracking in High Multiplicity Environments (TIME 2005), Zurich, Switzerland*, vol. A566, 2006. doi: 10.1016/j.nima.2006.05.041 pp. 45–49
- 59. F.-P. Schilling, "Diffractive DIS cross sections and parton distributions," in *33rd Intl. Conference on High Energy Physics (ICHEP 2006), Moscow, Russia*, 2006. doi: 10.1142/9789812790873_0113
- 60. F.-P. Schilling, "Prospects for measuring $B_s \to \mu\mu$ with the CMS detector," in 10th Intl. Conference on B Physics at Hadron Machines (BEAUTY 2005), Assisi, Italy, vol. 156, 2006. doi: 10.1016/j.nuclphysbps.2006.03.062 pp. 114–118
- 61. F.-P. Schilling, "DPDF: A Library for Diffractive Parton Distributions," in *HERA and the LHC: A Workshop on the Implications of HERA for LHC Physics, CERN and DESY, 2004-2005*, 2005. doi: 10.48550/arXiv.hep-ph/0601013 p. 511
- 62. P. R. Newman and F.-P. Schilling, "HERA diffractive structure function data and parton distributions," in *HERA and the LHC: A Workshop on the Implications of HERA for LHC Physics, CERN and DESY, 2004-2005*, 2005. doi: 10.48550/arXiv.hep-ex/0511032 p. 488
- 63. P. Laycock, P. Newman, and F. P. Schilling, "HERA diffractive structure function data and parton distributions," in *13th Intl. Workshop on Deep Inelastic Scattering (DIS 2005), Madison, USA*, W. H. Smith and S. R. Dasu, Eds., vol. 792, no. 1, 2005. doi: 10.1063/1.2122079 pp. 466–469
- 64. F.-P. Schilling, "Diffractive final states with the H1 detector at HERA," in *Intl. Europhysics Conference on High-Energy Physics (EPS-HEP 2003), Aachen, Germany*, vol. C33, 2004. doi: 10.1140/epjcd/s2004-03-1680-9 pp. s530-s532
- 65. A. Bruni, M. Diehl, and F.-P. Schilling, "Summary of working group B: Diffraction and vector mesons," in 12th Intl. Workshop on Deep Inelastic Scattering (DIS 2004), Slovakia (DESY-04-201), 2004. doi: 10.48550/arXiv.hep-ph/0410106
- 66. F.-P. Schilling, "Inclusive diffraction at HERA," in 31st Intl. Conference on High Energy Physics (ICHEP 2002), Amsterdam, The Netherlands, vol. 117, 2003. doi: 10.1016/S0920-5632(03)90578-0 pp. 403–407
- 67. F.-P. Schilling, "NLO QCD fit to H1 diffractive DIS data," in 10th Intl. Workshop on Deep Inelastic Scattering (DIS 2002), Cracow, Poland, vol. B33, 2002, pp. 3419-3424. [Online]. Available: https://www.actaphys.uj.edu.pl/R/33/11/3419
- F.-P. Schilling, "Diffractive jet production in DIS: Testing QCD factorisation," in 9th Intl. Workshop on Deep Inelastic Scattering (DIS 2001), Bologna, Italy, vol. 21, 2002. doi: 10.1142/9789812778345_0131 pp. 830–835
- 69. F.-P. Schilling, "Hard Diffraction: Results from H1 at HERA," in *Riken BNL Research Center Workshop (Vol. 34): High Energy QCD Beyond the Pomeron, Upton, New York, USA, BNL-52641*, 2001. doi: 10.2172/788891
- 70. F.-P. Schilling, "Diffractive dijet and 3-jet electroproduction at HERA," in 8th Intl. Workshop on Deep Inelastic Scattering (DIS 2000), Liverpool, UK, 2000. doi: 10.48550/arXiv.hep-ex/0012065 pp. 543–546
- 71. F.-P. Schilling, "Diffractive dijet production at HERA," in 7th Intl. Workshop on Deep Inelastic Scattering (DIS 1999), Zeuthen, Germany, vol. 79, 1999. doi: 10.1016/S0920-5632(99)00700-8 pp. 287–289

Conference Papers and Technical Reports

72. CMS Collaboration, "Search for the standard model Higgs boson produced in association with W or Z bosons, and decaying to bottom quarks," Tech. Rep. CMS PAS HIG-13-012, 2013. [Online]. Available: https://cds.cern.ch/record/1546801

- 73. CMS Collaboration, "Search for the standard model Higgs boson produced in association with W or Z bosons, and decaying to bottom quarks," Tech. Rep. CMS PAS HIG-12-044, 2012. [Online]. Available: http://cdsweb.cern.ch/record/1493618
- 74. CMS Collaboration, "Combination of top pair production cross sections in pp collisions at 7 TeV and comparisons with theory," Tech. Rep. CMS PAS TOP-11-001, 2011. [Online]. Available: http://cdsweb.cern.ch/record/1336491
- 75. CMS Collaboration, "Selection of Top-Like Events in the Dilepton and Lepton-plus-Jets Channels in Early 7 TeV Data," Tech. Rep. CMS PAS TOP-10-004, 2010. [Online]. Available: http://cdsweb.cern.ch/record/1280706
- 76. CMS Collaboration, "Algorithms for b Jet Identification in CMS," Tech. Rep. CMS PAS BTV-09-001, 2009. [Online]. Available: http://cdsweb.cern.ch/record/1194494
- 77. CMS Collaboration, "Plans for an early Measurement of the $t\bar{t}$ Cross Section in the Electron-plus-Jets Channel at $\sqrt{s}=10$ TeV," Tech. Rep. CMS PAS TOP-09-004, 2009. [Online]. Available: http://cdsweb.cern.ch/record/1194520
- 78. CMS Collaboration, "Prospects for the first Measurement of the $t\bar{t}$ Cross Section in the Muon-plus-Jets Channel at $\sqrt{s}=10$ TeV with the CMS Detector," Tech. Rep. CMS PAS TOP-09-003, 2009. [Online]. Available: http://cdsweb.cern.ch/record/1194519
- 79. CMS Collaboration, "Observability of Top Quark Pair Production in the Semileptonic Muon Channel with the first 10/pb of CMS Data," Tech. Rep. CMS PAS TOP-08-005, 2008. [Online]. Available: http://cdsweb.cern.ch/record/1198690
- 80. CMS Collaboration, "Measurement of the Top Quark Pair Production Cross Section with L=100/pb in Dileptonic Final States using the CMS Detector," Tech. Rep. CMS PAS TOP-08-002, 2008. [Online]. Available: http://cdsweb.cern.ch/record/1198688
- 81. T. Lampen, N. De Filippis, F.-P. Schilling, A. Schmidt, and M. Weber, "Comprehensive set of misalignment scenarios for the CMS tracker," Tech. Rep. CMS Note 2008/029, 2008. [Online]. Available: http://cdsweb.cern.ch/record/1166326
- 82. CMS Collaboration, "Impact of Tracker Misalignment on the CMS b-Tagging Performance," Tech. Rep. CMS PAS BTV-07-003, 2008. [Online]. Available: http://cdsweb.cern.ch/record/1198691
- 83. CMS Collaboration, "CMS Computing, Software and Analysis Challenge in 2006 (CSA06) Summary," Tech. Rep. CMS Note 2007/006, 2007. [Online]. Available: http://cdsweb.cern.ch/record/1027030
- 84. M. Albrow *et al.*, "Prospects for diffractive and forward physics at the LHC," Tech. Rep. CERN LHCC 2006-039, 2006. [Online]. Available: http://cds.cern.ch/record/1005180
- 85. G. L. Bayatian *et al.*, "CMS physics: Technical design report, Vol. 1: Software and Detector Performance," Tech. Rep. CERN LHCC 2006-001, 2006. [Online]. Available: http://cdsweb.cern.ch/record/922757

86. P. Vanlaer *et al.*, "Impact of CMS silicon tracker misalignment on track and vertex reconstruction," Tech. Rep. CMS Note 2006/029, 2006. [Online]. Available: http://cdsweb.cern.ch/record/927378

- 87. J. D'Hondt *et al.*, "Fitting of event topologies with external kinematic constraints in CMS," Tech. Rep. CMS Note 2006/023, 2006. [Online]. Available: http://cdsweb.cern.ch/record/926540
- 88. V. Karimaki, T. Lampen, and F.-P. Schilling, "The HIP algorithm for track based alignment and its application to the CMS pixel detector," Tech. Rep. CMS Note 2006/018, 2006. [Online]. Available: http://cdsweb.cern.ch/record/926537
- 89. H1 Collaboration, "Diffractive D* Meson Production in Deep Inelastic ep Collisions at HERA," Tech. Rep. Paper 6-0178 subm. to ICHEP 2004, Beijing, China, 2004. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-04-111.long.html
- 90. H1 Collaboration, "Dijets in Diffractive Photoproduction and Deep-Inelastic Scattering at HERA," Tech. Rep. Paper 6-0177 subm. to ICHEP 2004, Beijing, China, 2004. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-04-113.long.html
- 91. T. Alexopoulos *et al.*, "Electron deuteron scattering with HERA, a letter of intent for an experimental programme with the H1 detector," Tech. Rep. DESY-03-194, 2003. [Online]. Available: http://inspirehep.net/record/636853
- 92. H1 Collaboration, "Measurement of the Inclusive Cross Section for Diffractive Deep Inelastic Scattering at High Q2," Tech. Rep. Paper 6-0175 subm. to ICHEP 2004, Beijing, China, 2004. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-03-011.long.html
- 93. H1 Collaboration, "Comparison at NLO between Predictions from QCD Fits to F2D and and Diffractive Final State Observables at HERA," Tech. Rep. Paper 113 subm. to EPS-HEP 2003, Aachen, Germany, 2003. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-03-015.long.html
- 94. H1 Collaboration, "Dijets in Diffractive Photoproduction at HERA," Tech. Rep. Paper 087 subm. to EPS-HEP 2003, Aachen, Germany, 2003. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-02-113.long.html
- 95. H1 Collaboration, "Measurement and NLO DGLAP QCD Interpretation of Diffractive Deep-Inelastic Scattering at HERA," Tech. Rep. Paper 980 subm. to ICHEP 2002, Amsterdam, The Netherlands, 2002. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-02-012.long.html
- 96. H1 Collaboration, "Measurement of the Diffractive DIS Cross Section at low Q2," Tech. Rep. Paper 981 subm. to ICHEP 2002, Amsterdam, The Netherlands, 2002. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-02-112.long.html
- 97. H1 Collaboration, "Measurement of the Diffractive Structure Function F2D(3)(beta,Q2,xpom) at HERA," Tech. Rep. Paper 808 subm. to EPS-HEP 2001, Budapest, Hungary and paper 500 subm. to Lepton-Photon 2001, Rome, Italy, 2001. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-01-111.long.html
- 98. H1 Collaboration, "Diffractive Jet-Production in Deep-Inelastic e+p Collisions at HERA," Tech. Rep. Paper 960 subm. to ICHEP 2000, Osaka, Japan, 2000. [Online]. Available: http://www-h1.desy.de/h1/www/publications/htmlsplit/H1prelim-00-014.long.html

99. H1 Collaboration, "Diffractive Dijet Electroproduction at HERA," Tech. Rep. Paper 157ae subm. to EPS-HEP 1999, Tampere, Finland, 1999. [Online]. Available: http://www-h1.desy.de/h1/www/psfiles/confpap/eps99/99-131-schilling-paper.ps

Theses

- 100. F.-P. Schilling, "Diffractive Jet Production in Deep-Inelastic e+p Collisions at HERA," Ph.D. dissertation, University of Heidelberg, 2001, DESY-THESIS-2001-010. [Online]. Available: https://doi.org/10.11588/heidok.00001440
- 101. F.-P. Schilling, "Untersuchung von 2-Jet-Ereignissen in der diffraktiven tiefinelastischen Streuung mit dem H1-Detektor," Master's thesis, University of Heidelberg, 1998, H1TH-132. [Online]. Available: http://www-h1.desy.de/psfiles/theses/h1th-132.ps