List of publications (ordered by year)

As a member of a large scientific collaboration, I'm signed on more than 1000 publications, available in INSPIRE-1182145. Here, I list publications (and works that about to be published) where my contribution was significant.

In preparation / review

CMS and TOTEM Collaborations, *Observation of the production of high-p_T jets or electroweak bosons with an intact proton in pp collisions at $\sqrt{s}$ = 13 TeV, (expected: May 2025)*

2025

CMS Collaboration, *Combined effective field theory interpretation of Higgs boson, electroweak vector boson, top quark, and multi-jet measurements*, 2504.02958

D. d'Enterria et al., *Physics with high-luminosity proton-nucleus collisions at the LHC*, 2504.04268

M. Pitt, *Physics of pO Collisions at the LHC with Proton and Neutron Tagging*, *Acta Phys. Polon. Supp.* **18** (2025) 1–A11

FCC Collaboration, *Future Circular Collider Feasibility Study Report: Volume 1, Physics, Experiments, Detectors*, 2505.00272

C. Royon and M. Pitt, *Quartic anomalous coupling studies using intact protons at the LHC*, *PoS* **ICHEP2024** (2025) 377

M. Pitt, *Physics Perspectives with the ePIC Far-Forward and Far-Backward detectors*, *PoS* **DIS2024** (2025) 259, [2409.02811]

2024

CMS and TOTEM Collaborations, *Search for central exclusive production of top quark pairs in proton-proton collisions at $\sqrt{s}$ = 13 TeV with tagged protons*, *JHEP* **06** (2024) 187, [2310.11231]

CMS Collaboration, *Observation of $\gamma\gamma \to \tau\tau$ in proton-proton collisions and limits on the anomalous electromagnetic moments of the τ lepton*, *Rept. Prog. Phys.* **87** (2024) 107801, [2406.03975]

M. Pitt, *Constraining models of hadronic showers using proton-Oxygen collisions at the LHC involving proton/neutron tagging*, *PoS* **TAUP2023** (2024) 140

M. Pitt, *Physics perspectives of a CMS near-beam proton spectrometer at the HL-LHC*, *PoS* **LHCP2023** (2024) 012, [2401.06597]

2023

M. Pitt, *Diffractive and photon-induced production of top quark*, *Universe* **9** (2023)

M. Pitt, *Reducing model uncertainties using proton-oxygen collisions with proton/neutron tagging at the LHC*, *PoS* **ICRC2023** (2023) 426

CMS and TOTEM Collaborations, *A search for new physics in central exclusive production using the missing mass technique with the CMS detector and the CMS-TOTEM precision proton spectrometer*, *European Physical Journal C* **83** (Sept., 2023) 827, [2303.04596]

M. Pitt, *Physics at the HL-LHC with Proton Tagging*, *Acta Phys. Polon. Supp.* **16** (2023) 7–A12

CMS and TOTEM Collaborations, *Proton reconstruction with the CMS-TOTEM Precision Proton Spectrometer*, *JINST* **18** (2023) P09009, [2210.05854]

M. Hentschinski et al., *White Paper on Forward Physics, BFKL, Saturation Physics and Diffraction*, *Acta Phys. Polon. B* **54** (2023) 3–A2, [2203.08129]

2022

J. Kuśnierz, V. E. Padulano, M. Malawski, K. Burkiewicz, E. T. Saavedra, P. Alonso-Jordá et al., *A Serverless Engine for High Energy Physics Distributed Analysis*, in *22nd IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing*, 5, 2022. 2206.00942. DOI

C. Baldenegro, A. Bellora, S. Fichet, G. von Gersdorff, M. Pitt and C. Royon, *Searching for anomalous top quark interactions with proton tagging and timing detectors at the LHC*, *JHEP* **08** (2022) 021, [2205.01173]

M. Begel et al., *Precision QCD, Hadronic Structure & Forward QCD, Heavy Ions: Report of Energy Frontier Topical Groups 5, 6, 7 submitted to Snowmass 2021*, 2209.14872

2021

CMS collaboration, *The CMS Precision Proton Spectrometer at the HL-LHC – Expression of Interest*, CERN-CMS-NOTE-2020-008, March, 2021. 2103.02752

F. A. Di Bello, S. Ganguly, E. Gross, M. Kado, M. Pitt, J. Shlomi et al., *Towards a Computer Vision Particle Flow*, *Eur. Phys. J. C* **81** (2021) 107, [2003.08863]

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D. Turgeman, M. Pitt, I. Roth and E. Duchovni, *On the Modelling of Energetic Multi-jet QCD Events*, *Eur. Phys. J. C* **80** (2020) 1187, [1912.01254]

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ATLAS Collaboration, *Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016*, *Eur. Phys. J. C* **79** (2019) 205, [1810.05087]

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M. Pitt, P. M. M. Correia, S. Bressler, A. E. C. Coimbra, D. Shaked Renous, C. D. R. Azevedo et al., *Measurements of charging-up processes in THGEM-based particle detectors*, *JINST* **13** (2018) P03009, [1801.00533]

P. M. M. Correia, M. Pitt, C. D. R. Azevedo, A. Breskin, S. Bressler, C. A. B. Oliveira et al., *Simulation of gain stability of THGEM gas-avalanche particle detectors*, *JINST* **13** (2018) P01015, [1711.02073]

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ATLAS collaboration, M. Aaboud et al., *Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data*, *Eur. Phys. J. C* **76** (2016) 666, [1606.01813]

ATLAS collaboration, M. Aaboud et al., *Search for charged Higgs bosons produced in association with a top quark and decaying via $H^{\pm} \to \tau\nu$ using pp collision data recorded at $\sqrt{s} = 13$ TeV by the ATLAS detector*, *Phys. Lett. B* **759** (2016) 555–574, [1603.09203]

S. Bressler et al., *First in-beam studies of a Resistive-Plate WELL gaseous multiplier*, *JINST* **11** (2016) P01005, [1510.03116]

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ATLAS collaboration, G. Aad et al., *Search for the associated production of the Higgs boson with a top quark pair in multilepton final states with the ATLAS detector*, *Phys. Lett. B* **749** (2015) 519–541, [1506.05988]

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