

PERSONAL INFORMATION

Name: Michael Pitt

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• POSITIONS

- 2022 – Adjunct researcher
Department of Physics, The University of Kansas, Lawrence, USA
Research topic: QCD and physics of Ultra Peripheral Collisions at the LHC
- 2022 – Postdoctoral researcher
Department of Physics, Ben-Gurion University of the Negev, Israel
Research topic: Forward physics at the future Electron-Ion Collider (EIC)
- 2019 – 2022 Senior Research fellow,
EP Department, CERN, Geneva; Switzerland
Research topics: Forward physics with tagged protons, Physics of top quark
- 2018 – 2019 Postdoctoral researcher
Department of Particle Physics and Astrophysics, Weizmann Institute of Science, Israel
Research topics: Studies of multi-jet QCD events, Particle-Flow using Deep Learning

• EDUCATION

- 2012 – 2018 PhD in Physics: “*Experimental research in particle physics: Characterization of gas-avalanche THGEM particle detector and physics-data analysis with the ATLAS experiment*”, [CERN-THESIS-2018-224](#)
Department of Particle Physics and Astrophysics, Weizmann Institute of Science, Israel
Supervisors: Prof. Amos Breskin & Prof. Eilam Gross
- 2009 – 2012 Master: “*Experimental research in particle physics: Detector development and data analysis*”, [2012 JINST TH 003](#)
Department of Particle Physics and Astrophysics, Weizmann Institute of Science, Israel
- 2006 – 2009 Bachelor, Bar-Ilan University, Ramat-Gan, Israel
Double major in Physics and Theoretical Mathematics (with honours)

• FELLOWSHIPS AND AWARDS

- 2019 – 2022 Senior Research fellow, EP Department, CERN, Geneva; Switzerland
- 2019 Excellence fellowship in data science, Council for Higher Education, Israel.
Up to 3 fellowships of 90K USD for applicants for postdoctoral positions abroad in data science¹.

• RESEARCH RESPONSIBILITIES

- 2023 – 2025 Convenor of the Standard Model QCD sub-group, CMS Collaboration
- 2022 – Member of ePIC collaboration at EIC
- 2021 – 2023 Convenor of the Proton Physics Object Group, CMS Collaboration. Member of the CMS Physics Coordination, CERN
- 2020 – Member of Early-Career Researchers Panel (Israel representative), European Committee for Future Accelerators (ECFA)
- 2019 – Member of CMS collaboration at CERN
- 2019 – Member of the Israel Physical Society (IPS)
- 2015 – 2017 Scientific coordinator, Dr. Bessie F. Lawrence International Science Summer Institute, Davidson Institute of Science education, Israel
- 2010 – 2019 Member of ATLAS collaboration at CERN

¹ Data science also includes the following topics: Artificial intelligence, robotics, game theory, stochastic processes, signal processing, bioinformatics, personalized medicine, epidemiology, econometrics, psychometrics, cyber, quantum computations.

- **SUPERVISION OF STUDENTS**

- 2022 – Graduate Student Advisor, Department of Physics, Ben-Gurion University of the Negev, Israel
- 2020 – 2023 Supervisor – CERN Summer student program, CERN, Switzerland
- 2018 – 2019 Graduate Student Advisor, Department of Particle Physics and Astrophysics, Weizmann Institute of Science, Israel. Published a paper in peer-reviewed journal.

- **SELECTED TALKS AT WORKSHOPS AND CONFERENCES**

- 2023 “Constraining hadronic models using pO collisions at the LHC with proton/neutron tagging”, The XVIII International Conference on Topics in Astoparticle and Underground Physics, Vienna
- 2023 “Physics perspectives of a CMS near-beam proton spectrometer at HL-LHC”, Large Hadron Collider Physics Conference, Belgrade
- 2023 “Physics at the HL LHC with proton tagging”, The XXIX Cracow Epiphany Conference, Cracow, Poland
- 2022 “Recent results on VBF and VBS measurements”, QCD@LHC2022, IJCLab, France
- 2022 “Hard diffraction and proton tagging at the LHC”, LHC Working Group on Forward Physics and Diffraction, CERN
- 2022 “Tagging protons in p-O interactions”, LHC Working Group on Forward Physics and Diffraction, CERN
- 2022 “Searching for anomalous top quark interactions with proton tagging and timing detectors at the LHC”, 15th International Workshop n Top-Quark Physics (TOP2022), Durham, UK
- 2022 “Hard Diffraction and proton tagging at the LHC”, Saturation and Diffraction at the LHC and the EIC, ECT*, Italy
- 2022 “New physics results with the CMS Precision Proton Spectrometer”, LHC Seminar, CERN
- 2022 “LHC Run-3 prospects for Forward Physics and Diffraction”, IPS2022, Beer-Sheva, Israel
- 2021 “Inclusive and diffractive production of top quark(s)”, Low-X 2021, Elba Isl., Italy
- 2021 “Physics perspectives of using the HL-LHC as a photon collider”, IPS2021, Israel
- 2020 “Diffractive physics at the LHC with tagged forward protons”, IPS2020, Weizmann Institute of Science, Israel
- 2019 “Exclusive t \bar{b} production (SM/BSM)”, LHC Working group on Forward Physics and Diffraction, CERN

- **TEACHING/EDUCATION ACTIVITIES**

- 2018 – 2019 Teaching assistant – Practical Deep Learning for Science, Weizmann Institute of Science, Israel
- 2017 – 2018 Lecturer – Machine learning and Python, Computer Science in Academia and Industry, Davidson Institute of Science education, Israel

- **PUBLIC OUTREACH**

- 2020 – 2023 CERN official guide, Moderator of Masterclass sessions, CERN
- 2015 – 2019 Outreach activity in various programs at Davidson Institute of Science, the educational arm of the Weizmann Institute of Science: The international Science Summer Institute, the ALPHA program for the high school students with intellectual giftedness, the Ma’ale program for excelling Arab Students in Science and Engineering, Amos de-Shalit Science Youth camp and the Shalhevet Freier International Physics Tournament.