

Conference Presentations

Conference and Workshop Presentations

Physics and Performance

Speaker	Date	Conference/Workshop	Talk type	Title
Brendon Bullard	Sep /2022	HiggsHunting 2022	Young Scientist Forum	Overview of the ttW process and its measurements by the ATLAS experiment
Jannicke Pearkes	Jul /2022	ICHEP 2022	Poster	Projected sensitivity of Higgs boson pair production combining the bbyy and bbtatau decay channels at the HL-LHC with the ATLAS detector
Rafael Teixeira De Lima	May /2022	HiggsPairs2022	Plenary	ATLAS and CMS non-resonant HH->bbbb
Zhi Zheng	May /2022	LHCP2022	Parallel	Search for heavy particles decaying to 3rd generation quarks at CMS and ATLAS
Jannicke Pearkes	Mar /2022	Aspen2022	Plenary	HH searches with ATLAS
Jannicke Pearkes	Oct /2021	Higgs2021	Young Scientist Forum	Search for non-resonant di-Higgs production in the bbyy final state at 13 TeV with the ATLAS experiment
Rachel Hyneman	Oct /2021	Higgs2021	Plenary	Higgs-boson couplings and simplified template cross section measurements by ATLAS and CMS
Zijun Xu	Aug /2021	ICNFP2021	Plenary	Higgs boson measurements in couplings to quarks and leptons with the ATLAS experiment
Valentina Cairo	Jul /2021	EPS-HEP	Parallel	Searches for Higgs boson pair production with the full LHC Run-2 dataset in ATLAS
Zijun Xu	May /2021	Charm2021	Parallel	ATLAS results on charmonium production, B_c production and exotic heavy hadrons
Caterina Vernieri	Apr /2021	APS 2021	Plenary	Higgs and EW physics
Michael Kagan	Jun /2020	DM@LHC 2020	Plenary	ML for jet tagging and event classification (ATLAS+CMS)
Rafael Teixeira De Lima	May /2020	LHCP2020	parallel	Accessing HH at ATLAS and CMS with the HL-LHC
Michael Kagan	Feb /2020	Machine Learning at LHC	Plenary	Machine Learning in the Wild: Applications on ATLAS
Michael Kagan	Dec /2019	NeurIPS 2019 - Neuro-AI workshop	Poster	Continual Learning Via Neural Pruning
Michael Kagan	Oct 2019	AISIS 2019	Plenary	Machine Learning at the High Energy Frontier
Rebecca Carney	Oct /2019	BLV2019	Parallel	Searches for RPV SUSY at the LHC
Michael Kagan	July 2019	CERN OpenLab Summer School	Lecture	Introduction to Machine Learning
Valentina Cairo	June 2019	ATLAS Joint Tracking and Flavour Tagging Workshop 2019	Plenary	Summary on Physics Modeling
Valentina Cairo	June 2019	ATLAS Joint Tracking and Flavour Tagging Workshop 2019	Plenary	Tracking and Vertexing Developments, and Impact on Flavour Tagging
Su Dong	May 2019	SUSY 2019	Parallel	BSM Higgs Results from ATLAS
Valentina Cairo	May 2019	LHCP 2019	Parallel (ATLAS + CMS)	Recent soft QCD results from ATLAS and CMS

Valentina Cairo	May 2019	LHCP 2019	Parallel (ATLAS only)	Probing $g \rightarrow b\bar{b}$ with inclusive jets and $V \rightarrow$ jets with ATLAS
Michael Kagan	May 2019	LHCP 2019	Parallel	Machine Learning for Searches
Caterina Vernieri	March 2019	Aspen 2019	Plenary	Double Higgs production
Michael Kagan	Jan /2019	PHYSTAT-nu 2019	Plenary	Introduction to Machine Learning
Catrin Bernius	Dec /2018	Kruger 2018	Parallel	HL-LHC prospects from ATLAS and CMS
Aviv Cukierman	Nov /2018	MLJets2018	Plenary	Machine Learning for Jet Calibrations in ATLAS
Michael Kagan	Oct /2018	ASTERICS-OBELICS 2018	Plenary	Machine Learning in High Energy Physics
Michael Kagan	Oct /2018	Workshop on New Techniques In Particle Reconstruction for VBS	Plenary	B-tagging on ATLAS
Michael Kagan	Sep /2018	Double Higgs Production at Colliders	Plenary	Boosted Higgs Tagging at ATLAS and CMS
Michael Kagan	Aug /2018	MLHEP 2018 Summer School	Lecture	Deep Learning in High Energy Physics
Michael Kagan	July /2018	STFC Summer School in Artificial Intelligence and Machine Learning	Lecture	Machine Learning in High Energy Physics
Michael Kagan	July /2018	CERN OpenLab Summer School	Lecture	Introduction to Machine Learning
Aviv Cukierman	Jul /2018	BOOST 2018	Poster	Generalized Numerical Inversion for Jet Calibrations at ATLAS
Catrin Bernius	Jul /2018	CHEP 2018	Plenary	Track 1 Summary Talk: Online Computing
Catrin Bernius	Jul /2018	CHEP 2018	Poster	The ATLAS Trigger Simulation with Legacy Software
Ariel Schwartzman	Jul /2018	ICHEP 2018	Parallel	Searches for non-Standard Model decays to two light bosons of the Higgs boson
Ariel Schwartzman	Jul /2018	ICHEP 2018	Parallel	A High-Granularity Timing Detector for the Phase-II upgrade of the ATLAS Calorimeter system: detector concept, description and R&D and first beam
Michael Kagan	April 2018	Reconstruction, Trigger, and Machine Learning for HL-LHC Workshop	Plenary	Machine Learning for Jet Physics
Michael Kagan	March 2018	Moriond EW 2018	Plenary	Di-Higgs Results from ATLAS and CMS
Michael Kagan	Dec /2017	NeurIPS 2017	Poster	Learning to Pivot with Adversarial Networks
Michael Kagan	Sep /2017	ATLAS Joint Flavour Tagging and $H \rightarrow b\bar{b}$ Workshop 2017	Plenary	Machine Learning for Flavour Tagging and $H \rightarrow b\bar{b}$ Analysis
Catrin Bernius	Aug /2017	ACAT 2017	Poster	The ATLAS Trigger Simulation with Legacy Software (Proceedings)
Catrin Bernius	July /2017	DPF 2017	Parallel	The ATLAS Trigger Algorithms Upgrade and Performance in Run-2 (Proceedings)
Michael Kagan	July /2017	Hammers and Nails	Plenary	Domain Adaptation and Systematic Uncertainties in HEP
Francesco Rubbo	Jul /2017	BOOST 2017	Plenary	quark/gluon tagging
Michael Kagan	June /2017	ATLAS Machine Learning Workshop	Plenary	Mitigating Systematics with Adversarial Networks
Michael Kagan	May /2017	LHCP	Parallel	Machine Learning in Particle and Event Reconstruction
Michael Kagan	April /2017	CERN Academic Training Lecture Series	Lecture	Introduction to Machine learning: Lecture I and Lecture II

Francesco Rubbo	Mar /2017	CTD/WIT 2017	Young Scientist Forum	Weakly supervised classifiers in High Energy Physics
Su Dong	Feb /2017	Lake Louise Winter Institute	Plenary	Highlights from the LHC Energy Frontier
Francesco Rubbo	Feb /2017	LHC Theory Initiative Fellows Meeting 2017	Plenary	Machine learning for LHC applications
Michael Kagan	Aug /2016	Hadron Collider Physics Summer School	Lecture / Seminar	Deep Learning in High Energy Physics
Qi Zeng	Jul /2016	BOOST 2016	Plenary	X-> bbbar tagging
Ben Nachman	Jul /2016	BOOST 2016	Plenary	Studies of jet properties and measurements with high transverse momentum bosons
Nicoletta Garelli	Jul /2016	ICNFP2016	Plenary	Performance of the ATLAS detector in Run 2
Michael Kagan	Feb /2016	Connecting the Dots	Plenary	Jet Images -- Deep Learning Edition
Ariel Schwartzman	Jan /2016	ACAT2016	Plenary	Image processing, computer vision, and deep learning: New approaches to the analysis and physics interpretation of LHC events
Michael Kagan	Dec /2015	PITT PACC Workshop: Higgs and Beyond	Plenary	Di-Higgs: Experiment Status and Prospects
Francesco Rubbo	Oct /2015	Higgs Couplings 2015	Plenary	Higgs interactions and decays (LFV, FCNC, rare/exotic Higgs boson decays)
Michael Kagan	Aug /2015	Boost 2015	Plenary	ATLAS Searches in Run 1
Ben Nachman	Aug /2015	Boost 2015	Plenary	ATLAS measurements: jet charge and colour flow
Maximilian Swiatlowski	Jun /2015	USATLAS 2015 Workshop	Plenary, Parallel	Measuring the Standard Model and Searching for New Physics with the ATLAS Detector (Outstanding Graduate Student Award plenary) and Boosting Searches for SUSY with Jet Substructure
Ariel Schwartzman	Jun /2015	Preparing for the High-Luminosity Run of the LHC	Plenary	Pileup Mitigation
Michael Kagan	Jun /2015	USATLAS 2015 Workshop	Plenary	B-tagging on ATLAS
Philippe Grenier	Jun /2015	USATLAS 2015 Workshop	Plenary	The ATLAS Phase II Tracker
Ben Nachman	Jun /2015	ATLAS week poster session	Poster	Measurement of Colorflow in ttbar events
Giacinto Piacquadio	Mar /2015	Moriond EW 2015	Plenary	Run-I ATLAS Higgs results and perspectives for Run-II
Ben Nachman	Mar /2015	121st LHCC Meeting	Poster	Pushing the limits by looking within: Jet Substructure with the ATLAS Detector
Qi Zeng, Michael Kagan	Mar /2015	121st LHCC Meeting	Poster	b-Tagging in Boosted Environments
Michael Kagan	Feb /2015	Connecting the Dots 2015	Plenary	Jet-Images: Computer Vision Inspired Techniques for Jet Tagging
Giacinto Piacquadio	Sep /2014	Higgs Days 2014	Plenary	Measuring the Higgs coupling to b-quarks
Maximilian Swiatlowski	Aug /2014	BOOST-2014	Plenary	q/g Discrimination and Jet Pull at ATLAS
Ben Nachman	Aug /2014	BOOST-2014	Plenary	Jets from Jets and Fuzzy Jets
Ariel Schwartzman	Aug /2014	BOOST-2014	Plenary	Future prospects in jet substructure performance with ATLAS
Maximilian Swiatlowski	Jun /2014	LHCP-2014	Poster	Light Quark and Gluon Jet Discrimination with the ATLAS Detector (poster award winner)
Ben Nachman	Jun /2014	LHCP-2014	Poster	Jet Charge

Bryan Fulsom	Jun /2014	LHCP-2014	Plenary	Quarkonia Production and Polarization at Hadron Colliders
Giacinto Piacquadio	Jun /2014	The flavor of Higgs	Plenary	Flavor tagging and identification
Ariel Schwartzman	Mar /2014	Terascale Natural Supersymmetry Workshop	Plenary	Jet Substructure and Natural SUSY
Ariel Schwartzman	Jan/27 /2014	JetMET at High Pileup LPC Workshop	Plenary	Jets and Missing ET at ATLAS
Pascal Nef	Jan/21 /2014	Boston Jets Workshop 2014	Plenary	Pileup at ATLAS
Ben Nachman	Jan /2014	Boston Jets Workshop 2014	Plenary	Jet Charge and Jet Pull Performance
Ariel Schwartzman	Jan/21 /2014	Boston Jets Workshop 2014	Plenary	Jets, Subjets, and Particles
Maximilian Swiatkowski	Jan /2014	Boston Jets Workshop 2014	Plenary	Tagging Quark/Gluon Initiated Jets at ATLAS
Ariel Schwartzman	Oct/6 /2013	Kinematic Variables for New Physics at the LHC	Plenary	Jet Substructure at ATLAS
Caitlin Malone	Oct /2013	Higgs Coupling 2013	Plenary	Higgs Boson Decaying to Fermions in ATLAS and CMS
Maximilian Swiatkowski	Aug/14 /2013	BOOST-2013	Plenary	Exploration of new substructure techniques in ATLAS
Josh Cogan	Aug/14 /2013	BOOST-2013	Plenary	Applying computer vision techniques to jet flavor identification: from FisherFaces to FisherJets
Ariel Schwartzman	Aug/12 /2013	BOOST-2013	Plenary	Jets under HL-LHC Conditions
Ariel Schwartzman	Aug/03 /2013	Snowmass on the Mississippi	Parallel	ATLAS Jets and Missing ET Performance under HL-LHC Conditions
Ben Nachman	Jul /2013	EPS-2013	Poster	Search for Top Squark Pair Production
Rainer Bartoldus	Jul/17 /2013	US-ATLAS Physics Workshop 2013	Plenary	Trigger Performance and Outlook
Caitlin Malone	Jun/24 /2013	LP 2013	Poster	Search for top squark pair production in final states with one isolated lepton, jets, and missing transverse momentum
Emanuel Strauss	Mar/13 /2013	Aspen 2013	Plenary	Results of the search for Heavy Higgs and BSM Higgs Bosons from ATLAS
Maximilian Swiatkowski	Mar/13 /2013	LHCC 2013	Poster	Jets, ETmiss, and Jet Substructure and Tagging Performance in ATLAS
John Backus Mayes	Jul/24 /2012	BOOST-2012	Plenary	Jet reconstruction and calibration at high luminosity at ATLAS
Ariel Schwartzman	Jul/23 /2012	BOOST-2012	Plenary	Jets
Ariel Schwartzman	Jul/5 /2012	ICHEP-2012	Parallel	Performance of Jets and Missing ET in ATLAS
Till Eifert	Jun /2012	PLHC2012	Plenary	SUSY and BSM searches in ATLAS
Bart Butler	May/7 /2012	PHENO2012	Parallel	Searches for third generation squarks with the ATLAS detector
Ignacio Aracena	Mar /2012	MoriondQCD2012	Plenary	Top Quark Pair Production at $\sqrt{s} = 7$ TeV
Rainer Bartoldus	Jan/5 /2012	HEP2012	Plenary	ATLAS Detector Overview
Josh Cogan	Sep/1 /2011	SUSY11	Parallel	Search for supersymmetry in final states with measurable lifetime with the ATLAS detector

Bart Butler	Aug/31 /2011	PIC2011	Poster Talk	Searches for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in final states with missing transverse momentum, b-jets and no leptons
Paul Jackson	Aug/30 /2011	PIC2011	Poster Talk	Searches for Long-lived, Stable Massive Particles with the ATLAS experiment
Per Hansson	Aug/29 /2011	PIC2011	Poster	The ATLAS b jet Trigger
Josh Cogan	Aug/12 /2011	DPF	Parallel	Search for Stopped Long-lived particles with the ATLAS experiment
Bart Butler	Aug/9 /2011	DPF	Parallel	Search for New Physics in pp Collisions at $\sqrt{s} = 7$ TeV in Final States with Missing Transverse Energy and Heavy Flavor
Andy Haas	Sep/23 /2010	Topologies for Early LHC Searches	Plenary	ATLAS Status and plans
Paul Jackson	Aug/27 /2010	SUSY10	Parallel	Searches for semi-stable massive particles stopping in the ATLAS calorimeter
Claus Horn	Jul/30 /2010	IDM2010	Plenary	First LHC Results
Ariel Schwartzman	Jul/22 /2010	ICHEP	Parallel	Performance of Jet, Missing Transverse Energy and Tau Reconstruction with ATLAS in pp Collisions at $\sqrt{s} = 7$ TeV
David Miller	Jul/22 /2010	ICHEP	Poster	Luminosity and Beamspot Determination Using the ATLAS Detector
Michael Wilson	Jun/24 /2010	BOOST2010	Plenary	Decay characteristics of W bosons from heavy quarks
Michael Wilson	Jun/10 /2010	PLHC2010	Parallel	Early searches with leptons and photons with ATLAS
David Miller	May/13 /2010	Calor2010	Plenary	First Measurement of jets and missing transverse energy with the ATLAS calorimeter
Claus Horn	Jun/07 /2009	SUSY09	Parallel	A Bottom-up Approach to SUSY Analyses

Detectors, Instrumentation and Computing

Speaker	Date	Conference/Workshop	Talk type	Title
Andrew Young	Sep /2022	TWEPP 2022	Parallel	Radiation hard TwinAx for ATLAS ITk pixel electrical data transmission
Catrin Bernius	Sep /2020	Mu2e-II-2000	Plenary	The ATLAS Trigger and Data Acquisition System
Martin Kocian	Oct /2019	Vertex 2019	Plenary	Operational Experience and Performance with the ATLAS Pixel detector at the Large Hadron Collider at CERN
Martin Kocian	Dec /2018	Pixel 2018	Plenary	Operational Experience and Performance with the ATLAS Pixel detector at the Large Hadron Collider
Martin Kocian	Sep /2017	Vertex 2017	Plenary	Operational experience of ATLAS SCT and Pixel Detector
Wei Yang	Jul /2018	CHEP 2018	Poster	Xcache in the ATLAS Distributed Computing Environment
Wei Yang	Jul /2018	CHEP 2018	Poster	Using Containers on HPCs for ATLAS Experiment
Su Dong	Oct /2015	CPAD Instrumentation Frontier meeting: New Technologies for Discovery	Plenary	Higgs as a tool for discovery
Nicoletta Garelli	Oct /2015	ATLAS Muon & NSW week (Munich)	Plenary	Muon Run Coordination Report
Qi Zeng	Jun /2015	ATLAS week poster session	Poster	Improved Pixel Simulation Ionization Model
Ric Claus	May/24 /2015	PM 2015	Poster	A New ATLAS Muon CSC Readout System with System on Chip Technology on ATCA Platform
Nicoletta Garelli	Feb /2015	ATLAS Week - Ready for data?	Plenary	Muon Spectrometer Report
Nicoletta Garelli	Feb /2014	ATLAS week	Plenary	TDAQ

Nicoletta Garelli	Oct /2013	CHEP 2013	Parallel	The Evolution of the Trigger and Data Acquisition System in the ATLAS Experiment
Richard Mount	Oct /2013	CHEP 2013	Poster	Using Solid State Disk Array as a Cache for LHC ATLAS Data Analysis
Michael Kagan	Sep /2013	ICATPP	Parallel	Overview of the ATLAS Insertable B-Layer (IBL) Project
Nicoletta Garelli	Mar /2013	DAQ@LHC 2013	Plenary	Dataflow Monitoring
Su Dong	Jan /2013	Snowmass CSS/CPAD Instrumentation	Parallel	Trigger Systems For Future Experiments
Martin Kocian	Sep /2012	Vertex 2012	Plenary	Overview of the ATLAS Insertable B-Layer (IBL) Project
Su Dong	Aug /2012	SLAC Summer Institute 2012	Lecture	LHC Detector Upgrades
Rainer Bartoldus <i>et al.</i>	May/21 /2012	CHEP 2012	Poster	A System for Monitoring and Tracking the LHC Beam Spot with the ATLAS High Level Trigger
Josh Cogan	Oct/13 /2011	ICALEPCS 2011	Parallel	ATLAS Online Determination and Feedback of LHC Beam Parameters
Emanuel Strauss	Sep/05 /2011	ACAT 2011	Parallel	Online Measurement of LHC Beam Parameters with the ATLAS High Level Trigger
Su Dong	Jun/24 /2011	Vertex 2011	Conference Summary	Summary of Vertex-2011
Philippe Grenier	Jun/10 /2011	TIPP 2011	Parallel	Silicon sensor technologies for ATLAS IBL upgrade
Rainer Bartoldus	Jun/13 /2011	TIPP 2011	Parallel	Online Determination of the LHC Luminous Region with the ATLAS High-Level Trigger
Rainer Bartoldus <i>et al.</i>	Oct/18 /2010	CHEP 2010	Poster	Measurement of the LHC Beam Parameters Using the Distributed High Level Trigger System of the ATLAS Detector during 2009 and 2010
Matthias Wittgen	Sep/22 /2010	TWEPP 2010	Parallel	A Reconfigurable Cluster Element (RCE) DAQ Test Stand for the ATLAS Pixel Detector Upgrade
David Miller	May/24 /2010	Real-Time 2010	Parallel	Online Measurement of LHC Beam Parameters with the ATLAS High Level Trigger
Rainer Bartoldus	May/24 /2010	IPAC10	Poster	Characterization of Interaction-Point Beam Parameters Using the pp Event-Vertex Distribution Reconstructed in the ATLAS Detector at the LHC
Philippe Grenier	Feb/24 /2010	5th Trento Workshop	Plenary	Test beam results of 3D pixel sensors from different manufacturers
Per Hansson	Feb/17 /2010	Vienna Conference on Instrumentation	Plenary	Recent Test Beam Results of Radiation Hard 3D Silicon Pixel Sensors
Ignacio Aracena	Oct/27 /2009	IEEE NSS-MIC 2009	Parallel	Operational Experience of the ATLAS High Level Trigger with Single?Beam and Cosmic Rays
Martin Kocian	Mar/04 /2009	ACES 2009	Plenary	Electrical transmission on cables at Gbit/s
Mike Huffer	Mar/03 /2009	ACES 2009	Plenary	High bandwidth generic DAQ research and application for LHC detector upgrade
Sarah Demers	Oct/18 /2008	IEEE NSS-MIC 2008	Parallel	The ATLAS Trigger