

Monday, May 8, Parallel Session I

	BSM I (104)	BSM II (105)	BSM III (106)	BSM XIII (107)	Neutrino I (203)	Theory I (205)	SM I (120)	Cosmology I (207)
Chair	Ben Carlson	Lingfeng Li	Valentina Dutta	Hongkai Liu	Joshua Berger	Ben Lillard	Kirtimaan Mohan	Jay Hubisz
2:15 - 2:30	Dark Photons from Charged Pion Bremsstrahlung at Proton Beam Experiments Rachel Nguyen	Lmu-Ltau model constraints from collider search Si Wang	Constraining new physics with Borexino Phase-II spectral data Joao Paulo Pinheiro	Neutrino masses and self-interacting dark matter in a Z-Z' mixing model Leon Manuel Garcia de la Vega	First Measurement of Inclusive Muon Neutrino Charged Current Triple-Differential Cross Section on Argon London Cooper-Troendle	Kerr Blackhole Perturbation and Metric Reconstruction Problem in a Horizon-Penetrating Coordinates Mohamed Fawzi	Understanding the W-boson mass Alessandro Vicini	Cornering Extended Starobinsky Inflation with CMB and SKA Benedikt Schosser
2:30 - 2:45	Searching for new symmetries in the Higgs sector at ATLAS Paul Thompson	Probing New Physics with $\mu^+\mu^- \rightarrow bs$ at a Muon Collider Sri Aditya Gadam	Detecting Nanometer-Scale New Forces with Coherent Neutron Scattering Zach Bogorad	Discovering the Origin of Neutrino Masses at SHiP Douglas Tuckler	Recent Results from MicroBooNE's Low Energy Excess Search Wanwei Wu	1+1D Hadrons Minimize their Biparton Renyi Free Energy Pouya Asadi		Gauged quintessence Jiheon Lee
2:45 - 3:00	Searches for Dark Matter with the ATLAS Experiment at the LHC Jia Jian Teoh	Isosinglet vectorlike leptons at e^+e^- colliders Prudhvi Bhattiprolu	Constraining light dark Z with low-energy experiments Eduardo Peinado Rodriguez	Exploring the Neutrino Sector of the Minimal Left-Right Symmetric Model Gustavo Figueiredo Severiano	Neutrino forces in neutrino backgrounds Mitrajyoti Ghosh	Corrections to Hawking radiation from asteroid mass primordial black holes: Formalism of dissipative interactions in quantum electrodynamics Makana Silva	Recent highlights of top-quark cross section and properties measurements with the ATLAS detector at the LHC Lorenzo Bellagamba	Seeing highly anisotropic gravitational wave backgrounds from phase transitions Arushi Bodas
3:00 - 3:15	Searches for new physics with leptons using the ATLAS detector Roy Schimmel	Testing Lepton Flavor Universality at Future Lepton Colliders Xuhui JIANG	IceCube at the frontier of macroscopic dark matter direct detection Mrunal Korwar	Neutrino Long-Range Self-Interaction and its impact on Cosmic Structure Formation Xuheng Luo	What can the upcoming large neutrino detectors tell us about flavor transitions of galactic supernova neutrinos? Guey-Lin Lin	Oscillation Phenomena in Nambu Quantum Mechanics Nabin Bhatta	Precision W and Z measurements at ATLAS Pierre-Hugues Beauchemin	Enhancing CMB acoustic phase shift with dark matter loading Daven Wei Ren Ho
3:15 - 3:30	Searches for supersymmetric particles with prompt decays with the ATLAS detector Flera Rizatdinova	Lepton Flavor Violation at Electron-Positron Colliders Pankaj Munbodh	Searching for Dark Matter Annihilation with IceCube and P-ONE Stephan Meighen-Berger	Gravitational waves from phase transitions and cosmic strings in neutrino mass models with multiple Majorons Moinul Hossain Rahat	Towards precise predictions of the diffuse supernova neutrino background Nick Ekanger	Radion Stabilization with Bulk Fields Robert Clemenson	Hadronization Fractions and Exotic Heavy Flavor at CMS Matthew Jones	Left-Right Symmetry Breaking and Gravitational Waves : A Tale of Two Phase Transitions Zafri Ahmed Borboruah
3:30 - 3:45	Searches for BSM resonances in ATLAS Blaz Leban	CP Violating Top Higgs Coupling at the Future Muon Collider Morgan Cassidy	Earth-Catalyzing Detection of Magnetic Inelastic Dark Matter Graham Kribs	Detecting Superradiant Dark Photon Strings in Gravitational Wave Experiments Clayton Ristow	Here Comes the Sun: Solar Parameters in Long-Baseline Accelerator Neutrino Oscillations Peter Denton	Constructing Operator Basis in Supersymmetry Runqing Wang	Recent results on associated top quark production and searches for new top-quark phenomena with the ATLAS detector Brendon Bullard	Cosmic Stasis from Primordial-Black-Hole Evaporation and Its Phenomenological Implications Brooks Thomas
3:45 - 4:00	Secluded dark matter in gauged $B - L$ model Rojalin Padhan	Invisible Higgs from forward muons at a muon collider Maximilian Ruhdorfer	Repurposing Precision SM Measurements to Constraint New Physics Sagar Airen	Collider Signatures of Near-Continuum Dark Matter Steven Ferrante	High-energy neutrino cross sections Keping Xie	What UV Evolution Can Tell Us About The Dark Sector Aidan Reilly	Jet SIFT-ing: a new scale-invariant jet clustering algorithm for the substructure era Joel Walker	Chiral Plasma Instability in the Early Universe Tina Kahniashvili

Monday, May 8, Parallel Session II

	BSM IV (104)	BSM V (105)	BSM VI (107)	Axion I (120)	DM I (106)	Tools I (203)	SM II (205)	Cosmology II (207)
Chair	Tatsu Takeuchi	Xerxes Tata	Subhajit Ghosh	Maeve Madigan	Javier Acevedo	Lisa Benato	Terrance Figy	Joel Walker
4:30 - 4:45	Vectorlike Fermions as Portals into Higgs Vacuum Stability Tom Steudtner	Bubble profile and baryon asymmetry in the C2HDM Ajay Kaladharan	A Colorful Mirror Solution to the Strong CP Problem Claudio Andrea Manzari	Physics with axions and axion-like particles Felix Yu	Ab-initio all-electron calculation of dark matter--electron scattering rates with emphasis on theoretical uncertainties Aman Singal	Highly Improved Direct Detection Rate Calculation Ben Lillard	A phenomenological study of Higgs Jets at a Muon Collider Jay Desai	Dynamics of Dark Matter Misalignment Through the Higgs Portal Mudit Rai
4:45 - 5:00	Cosmological gravitational particle production of massive spin-2 particles Siyang Ling	Cogenesis of visible and dark sector asymmetry in a minimal seesaw framework Lekhika Malhotra	A Twin Higgs Model with SU(4) Color Logan Page		Directional detection of dark matter with anisotropic response functions Benjamin Lehmann	Normalizing flows and uncertainty quantification in hadronization simulations Ahmed Youssef	Some applications of the Eikonal model with Coulomb and curvature corrections in pp and $\bar{p}p$ scattering Phuoc Ha	Mass-varying Dark Matter from a Phase Transition Sayan Mandal
5:00 - 5:15	Anomaly Mediated Supersymmetry Breaking for Chiral Gauge Theories Bethany Suter	Cogenesis of Baryon asymmetry and gravitational dark matter from primordial black holes Suruj Jyoti Das	Precision Cosmological Constraints on Atomic Dark Matter Jared Barron	Probe axion-like particles at the electron-ion collider Hongkai Liu	Recent Developments in Measuring the Migdal Effect Duncan Adams	Resolving Combinatorial Ambiguities in the tt Event Topologies with Quantum Algorithms Zhongtian Dong	Impact of dimension-eight SMEFT operators in the EWPO and Triple Gauge Couplings analysis in Universal SMEFT Peter Reimitz	Supermassive Black Hole seeds from Dark Matter Annihilation Yash Aggarwal
5:15 - 5:30	FIMP Dark matter from Flavor models Shreyashi Chakdar	Dirac dark matter, neutrino masses, and dark baryogenesis Walter Tangarife	Simulating Atomic Dark Matter in Milky Way Analogues Sandip Roy	Heavy QCD axions via dimuon final states Zhen Liu	The Molecular Migdal Effect Ian Harris	Reducing MC Variance One Control Variate at a Time Jacob Scott	Unpolarized Transverse-Momentum-Dependent Parton Distributions of the Nucleon from Lattice QCD Jinchen He	Constraints on Scalar Dark Matter Production from the Inflaton Sarunas Verner
5:30 - 5:45	New Horizons in the Holographic Phase Transition Bharath Sambasivam	A natural model of spontaneous CP violation Motoo Suzuki	Probing Atomic Dark Matter using Simulated Galactic Subhalo Populations Caleb Gemmell	Searching for the DFSZ Axino in Collider Experiments Gabriel Hoshino	Results from sub-GeV dark matter searches with SENSEI Kelly Stifter	Decision tree autoencoder anomaly detection on FPGA at L1 triggers Stephen Roche	Master Integrals for Electroweak corrections to $gg \rightarrow \gamma\gamma$ Gabriele Fiore	Dark Matter Distribution in the Shapley Supercluster Sunhaeng Hur
5:45 - 6:00	Mass-varying gauge boson that couples to the dark energy field Jaeok Yi	The Earth Mover's Distance as a Measure of CP Violation Tony Menzo	Magnetic Moments of Dark Baryons Chester Mantel	MAGPI: Measurement of Axion Gradients with Photon Interferometry Michael A. Fedderke	Probing Dark Matter Substructure with Pulsar Timing Arrays Vincent Lee	MadNIS - Neural Multi-Channel Importance Sampling Theo Heimel	Challenges with Internal Photons in Constructive QED Neil Christensen	Nonrelativistic vector dark matter nonminimally coupled to gravity Hong-Yi Zhang
6:00 - 6:15	What Can Generalized Symmetries Do For You Seth Koren	Proton decay from quark and lepton compositeness Benoit Assi	Dark photons as boosted dark matter Varun Mathur	Searching for a fifth force with atomic and nuclear clocks Dawid Brzeminski	Search for prompt production of a GeV scale resonance decaying to a pair of muons using data scouting at CMS Zhangqier Wang	Feature selection using distance correlation Ranit Das	NLO-SM physics simulation with Whizard Wolfgang Heinz Kilian	Gravitational Wave and Parity Odd Signals at the Cosmological Collider Xuce Niu
6:15 - 6:30	Vector boson dark matter in a classically conformal U(1) extension of the Standard Model Victor Baules	Dark Matter Induced Nucleon Decay Signals in Mesogenesis Joshua Berger	Distortion of neutrino oscillations by dark photon dark matter Katarina Bleau	Discovering the QCD Axion with Polarization Haloscopes Kevin Zhou	Detecting Ultralight Dark Photon Dark Matter Using Optomechanical Sensors Dorian Amaral	The Physics of Neural Networks Hannah Day	Measurements of processes sensitive to quartic electroweak couplings in ATLAS John Patrick Mc Gowan	Baryogenesis in a Parity Solution to the Strong CP Problem Isaac Wang
6:30 - 6:45	EFT for Heavy Dark Matter of Arbitrary Spin Sandra Kvedaraitė	Asymptotically safe dark matter with gauged baryon number Noah Donald	The continuum dark matter zoo Ameen Ismail	From SuperMAG to SNIPE Hunt: Using the Earth to search for ultralight dark matter Saarik Kalia	An Analytic Approach to Light Dark Matter Propagation Christopher Cappiello	Measuring Galactic dark matter through unsupervised machine learning Sung Hak Lim	AFB in High Invariant-Mass Drell-Yan: Implications for SMEFT Fits Yingsheng Huang	Parity-violating signals from cosmological collider Yunjia Bao

Tuesday, May 9, Parallel Session I

	BSM VII (104)	BSM VIII (121)	BSM IX (107)	Axion II (207)	DM II (203)	Gravity I (205)	SM III (106)	BSM XIV (120)
Chair	Shreyashi Chakdar	Pouya Asadi	Sandra Kvedaraite	Michael Fedderke	Sandra Robles	Benjamin Lehmann	Chiara Bissoletti	Saarik Kalia
2:00 - 2:15	Lepton Flavor Portal Matter-1 Ricardo Alexandre Dos Sanstos Ximenes Filho	The Light Dark Matter eXperiment (LDMX) Valentina Dutta	Drell-Yan tails as flavour probes of new physics Lukas Allwicher	Search for sub-MeV axion-like particles from horizontal branch stars Takuya Okawa	Constraining Dark Matter Substructure With Gaia Wide Binaries Edward Ramirez	Constraining Electromagnetic Signals from Black Holes with Hair Nicole Crumpler	Measurements of Higgs boson properties (mass, width, and Spin/CP) with the ATLAS detector Luca Franco	Cosmological challenges for dark sectors with new gauge forces Navin McGinnis
2:15 - 2:30	Lepton Flavor Portal Matter-2 Shu Tian Eu	Extending the Discovery Potential for Inelastic-Dipole Dark Matter with FASER Max Fieg	Drell-Yan Bound on Continuum Spectra from Extra Dimensions Torrey Saxton	Spectral distortions of astrophysical blackbodies as axion probes Erwin Tanin	Measuring Dark Matter in the Solar Neighborhood using Normalizing Flows and Gaia DR3 Eric Putney	Relativistic Signatures of Flux Eruption Events Near Black Holes Zack Gelles	Non-resonant di-Higgs searches in bbtt, bbgg, bbZZ, bbWW, WWgg, and multilepton final states at CMS Vivan Nguyen	A new picture for scalar boson superpartners, with only second-order gauge couplings and reduced cross-sections Roland Allen
2:30 - 2:45	Probing Lepton Number Violation and Majorana Nature of Neutrinos at the LHC Dorival Gonçalves	Doped Semiconductor Devices for sub-MeV Dark Matter Detection Peizhi Du	Exploring the Flavor Symmetry landscape of Composite Higgs models Lorenzo Ricci	Detecting Axion-Like Particles with Primordial Black Holes Tao Xu	The dark matter profile of the Milky Way inferred from its circular velocity curve Xiaowei Ou	Spinor Bose Einstein Condensates : From Cosmos to Laboratory Mudit Jain	Measurements of Higgs boson production and decay rates and their interpretation with the ATLAS experiment Shuo Han	Probing BSM physics with Solar and Atmospheric Neutrinos in Dark Matter Experiments Tom Schwemberger
2:45 - 3:00	Heavy Neutral Lepton at Future Muon Collider Peiran Li	LLPs from photons and charged mesons at beam dumps Aparajitha Karthikeyan	Anomalies, Representations and Self-Supervision Luigi Favaro	Probing Axionic Instabilities in the late Universe via CMB-B mode Subhajit Ghosh	Dark Matter-Induced Baryonic Feedback in Galaxies Yilda Boukhtouchen	Freezing-In Gravitational Waves Jan Schütte-Engel	Probing the nature of electroweak symmetry breaking with Higgs boson pairs in ATLAS Christina Dimitriadi	Light Neutrinophilic Dark Matter from Scotogenic Model vishnupk Padmanabhan
3:00 - 3:15	Searching for Heavy Neutral Leptons at A Future Muon Collider Ariel Rock	Quirky Signals at Colliders Joshua Forsyth	Deep Learning Symmetries in Physics and Beyond Roy Forestano	Imprints of Axion's Evolution in CMB Shuyang Cao	Probing the Local Dark Matter Halo with Neutrino Oscillations Andrey Shkerin	The Primordial Black Holes that Disappeared: Connections to Dark Matter and MHz-GHz Gravitational Waves Thomas Gehrman	Multi-photon decays of the Higgs boson at the LHC Samuel Lane	Inevitable Large non-Gaussianity from Curvaton Models Jacqueline Lodman
3:15 - 3:30	Heavy Neutrino Decay: Detection Sensitivity and Decay Width Yulun Li	Keep it Simple: Simplified Frameworks for Long-Lived Particles at Neutrino Facilities Wenjie Huang	Entangled Taus at Colliders Prisco Lo Chiatto	Distinguish axion models with SPARC Chen Sun	Solar reflection of light dark matter with light mediators Hailin Xu	Planck Constraints and Gravitational Wave Forecasts for Primordial Black Hole Dark Matter Seeded by Multifield Inflation Sarah Geller	A Guide to Anomaly-Mediated Supersymmetry Breaking QCD Andrew Wesley Gomes	To profile or to marginalize - A SMEFT case study Nina Elmer
3:30 - 3:45	What if cLFV was only manifest in tau decays? Innes Bigaran	Reconstruction, Trigger Efficiency and Exclusion Studies for MATHUSLA Jaipratap Grewal	Entanglement and Bell's inequalities with boosted semi-leptonic top quarks at the LHC Alberto Navarro	Finding Exotic Particles with Fireballs Melissa Diamond	Heating of Neutron Stars through Scattering and Capturing of Inelastic Dark Matter with Ultra-Relativistic Targets Mehrddad Phoroutan-Mehr	Going Underground or Listening to the Sky? Anupam Ray	The top quark legacy of the LHC Run II for PDF and SMEFT analyses Maeve Madigan	Searches for BSM physics using challenging and long-lived signatures with the ATLAS detector Margaret Susan Lutz
3:45 - 4:00	Vectorlike leptons and long-lived bosons at the LHC Elias Bernreuther	Status of negative coupling modifiers for extended Higgs sectors Carlos Henrique de Lima	On two-body and three-body spin correlations in leptonic $t\bar{t}Z$ production and anomalous couplings at the LHC Rafiqul Rahaman	The Flavor of QCD axion dark matter Gonzalo Alonso Alvarez	Neutrino and Gamma Ray Annihilation Signatures From Inelastic Dark Matter Around Neutron Stars Narayani Tyagi	Detecting Dark Compact Objects in Gaia DR4: A Data Analysis Pipeline for Transient Astrometric Lensing Searches I-Kai Chen	Lighting up the LHC with Dark Matter Tong Ou	

Tuesday, May 9, Parallel Session II

	BSM X (104)	BSM XI (205)	BSM XII (107)	Axion III (207)	DM III (203)	Higgs I (121)	Cosmology III (106)	SM IV (120)
Chair	Paul Thompson	Joachim Brod	Seth Koren	Jan Schutte-Engel	Gopolang Mohlabeng	John Allison	Brooks Thomas	Dorival Gonalves
4:30 - 4:45	Searches for BSM interactions with top quarks and EFT interpretations at CMS Brent Yates	The role of dimension-8 operators in an EFT for the 2HDM Matthew Sullivan	Low-Energy Supernovae Bounds on Sterile Neutrinos Garv Chauhan	Stellar Axion Background Ngan Nguyen	Searching for ultralight dark matter using radio telescopes Shuailiang Ge	Higgs boson physics: an update Ian Lewis	Learning about the early universe from dips in the gravitational wave spectrum Biswajit Padhi	Variant Nelson-Barr Mechanism with Minimal Flavor Violation George Wojcik
4:45 - 5:00	Searches for electroweak production of SUSY particles with the CMS experiment Pablo Matorras-Cuevas	Modifying Froggatt Nielsen : An EFT approach Arindam Bhattacharya	Neutrino pair radiation from pulsar binaries Margarita Gavrilova	The Irreducible Axion Background Kevin Langhoff	Evaporation Barrier for Dark Matter in Celestial Bodies Javier Acevedo		Light Stepped Dark Sectors Face Cosmological Data Sets Itamar J. Allali	Redefining Performance: New Techniques for ATLAS Jet & MET Calibration ATLAS Collaboration
5:00 - 5:15	Search for inelastic dark matter with the CMS detector Samuel Kai Bright-Thonney	Flavor-changing light bosons with accidental longevity Kunfeng Lyu	Probing the Sun for BSM Physics using RHESSI Robert Gustafson	A new production mechanism for dark photons Edward Broadberry	More Ways to (Be) Cool: Compact Objects from Inelastic Dark Matter Leo Kim	Top Yukawa Coupling Measurement at High Energy Muon Collider Ishmam Mahbub	CMB Bounds from Primordial Black Hole Accretion Gregory Suzzewski	Gravitational waves, vacuum decay, and the 2PI formalism Eleanor Hall
5:15 - 5:30	SUSY searches in photonic final states with CMS Manfred Paulini	Lepton Flavor Specific Extended Higgs Models Matthew Knauss	Cosmological Constraints on Long Lived Supersymmetric Particles Dipan Sengupta	Hybrid Cosmological Collider of Axion Lingfeng Li	Dark photon conversion in the presence of multiple level crossings Nirmalya Brahma	Effects of EFT operators on off-shell production of the Higgs boson Lucas Kang	Dark Radiation from Neutrino Mixing after Big Bang Nucleosynthesis Daniel Aloni	CPV Searches @ COLLIDERS Amarjit Soni
5:30 - 5:45	Search for long-lived particles decaying to trackless jets with advanced machine learning techniques at CMS Lisa Benato	Probing type-II seesaw mechanism in alternative $U(1)_X$ model Puja Das	Constraining Ultralight Scalar Dark Matter with Quadratic Couplings from Big Bang Nucleosynthesis Tom Bouley	Zero Modes from Massive Fermions and Axion Strings Katherine Fraser	Probing Dark Matter-Neutrino Interactions via Supernova Neutrinos Deepak Sathyan	Exploring CP Violation in the Higgs Sector Through Higgs Boson Production in Association of Three Jets Terrance Figy	Higgsed dark photons without isocurvatures Wen Han Chiu	A new statistical model for estimating PDF uncertainties Kirtimaan Ajaykant Mohan
5:45 - 6:00	Searches for non-conventional signatures at CMS Jingyu Luo	Neutral-current SMEFT studies with EIC and LHeC DIS pseudo data Chiara Bissolotti	Probing ultralight dark-photon dark matter with asteroids Anubhav Mathur	The inflated Chern-Simons number in spectator chromo-natural inflation Hengameh Bagherian	Neutrinos from Dark Matter Annihilation versus the Diffuse Supernova Neutrino Background Sandra Robles	Unfolding Higgs-top CP measurement Rahool Kumar Barman	Cosmologically Varying Kinetic Mixing Xucheng Gan	Precision Electroweak Tensions and a Wide Dark Photon Evan Petrosky
6:00 - 6:15	New search strategies for exotic decays of the Higgs boson to four bottom quarks using vector boson fusion Ben Carlson	Precision electroweak measurements and SMEFT studies at the EIC Kaan Simsek	Characterizing the Galactic Center gamma-ray Excess using differentiable probabilistic programming Yitian Sun	CMB birefringence from cosmic axion strings Ray Hagimoto	Visible Signatures of Dark Photon Decays in LDMX Tyler Horoho	Non-resonant di-Higgs searches in four b final state at CMS Chuyuan Liu	An Effective Field Theory of 21 cm Radiation with Redshift Space Distortions Wenzer Qin	Amplitude/Operator Basis for Chiral Perturbation Theory Minglei Xiao
6:15 - 6:30	Prospects of Heavy Higgs scalar in the natural SUSY at LHC upgrades Kairui Zhang	Resolving CDF- W mass shift and CKM unitarity puzzle in Left-Right Symmetric Models with Universal Seesaw Ritu Dcruz	Limits on Dark Matter Annihilation from the Shape of Radio Emission in M31 Mitchell Weikert		Stellar Binary Hardening: A Novel Method to Probe Sub-Solar Mass Primordial Black Holes Badal Bhalla	Measurements of Higgs boson production and decay rates and their interpretation with the ATLAS experiment Shuo Han	NGC 1068 and Neutrino Self-Interactions Jeffrey Hyde	Determining the CP Property of the $h\bar{t}t$ Coupling via a Gluon Jet Anisotropy Substructure Zhite Yu

BANQUET (Carnegie Music Hall ,6:45pm - 10:00pm)