

2021 Meeting of the Division of Particles and Fields of the American Physical Society (DPF21)

Monday, July 12, 2021

Beyond Standard Model: BSM 1A - Track A (2:30 PM - 4:00 PM)

-Conveners: Sabyasachi Chakraborty; Elodie Deborah Resseguie; Tova Ray Holmes

time	[id] title	presenter
2:30 PM	Break	
2:45 PM	[393] Search for chargino pair-production and chargino-neutralino production with R -Parity Violating decays in pp collisions at $\sqrt{s}=13$ TeV with ATLAS	FLORES, Lucas Macrorie
3:00 PM	[249] Search for top squark production in fully-hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV	MERRITT, Anna Henckel
3:15 PM	[156] Searching for Electroweak Supersymmetry with the ATLAS Detector	DANDOY, Jeff
3:30 PM	[303] Updated status of the gluino searches in pMSSM in the light of latest LHC data and Dark Matter constraints	MUKHERJEE, Abhi
3:45 PM	[217] Search for Gluino-Mediated Stop Pair Production in Events with b-jets and Large Missing Transverse Momentum Collected with the ATLAS Detector	ANTIPOV, Egor

Beyond Standard Model: BSM 1G - Track G (2:30 PM - 4:00 PM)

-Conveners: Ryan Sangwoo Kim; Ben Carlson; Pavel Fileviez Perez

time	[id] title	presenter
2:30 PM	[350] New Contributions to Flavour Observables from Left-Right Symmetric Models with Universal Seesaw	DCRUZ, Ritu
2:45 PM	[43] Search for Vector-Like-Quarks T/B in Same-Sign Dilepton and Multi-lepton Final States at $\sqrt{s}=13$ TeV	Ms WONG, Jess
3:00 PM	[210] Call for Abstracts Search for pair production of vector-like quarks in the $Wb+X$ final state using the full Run 2 dataset of pp collisions at $\sqrt{s}=13$ TeV from the ATLAS detector	VAN DE WALL, Evan Richard
3:15 PM	[291] All-Hadronic search for Vector-Like Quarks using the BESTagger with 137 fb^{-1} of $\sqrt{s}=13$ TeV proton-proton collisions collected by CMS	BONILLA, Johan Sebastian
3:30 PM	[339] Single Vector-Like quark production via chromo-magnetic moment at the LHC	WANG, Xing
3:45 PM	[319] Heavy leptons and the muon anomalous magnetic moment	Dr MCGINNIS, Navin

Beyond Standard Model: BSM 2A - Track A (4:15 PM - 5:45 PM)

-Conveners: Nicholas Bower; Zijun Xu; Marc Sher

time	[id] title	presenter
4:15 PM	[8] The Higgs and Leptophobic Force at the LHC	GOLIAS, Elliot

4:30 PM	[148] Implications of the Muon Anomalous Magnetic Moment for 3-3-1 Models	Ms SÁNCHEZ VILLAMIZAR, Yoxara
4:45 PM	[46] Additional Baryons and Mesons	FRAMPTON, Paul
5:00 PM	[281] Probing MeV-Range Scalar Bosons and TeV Range Vectorlike Fermions Associated with $U(1)_{T3R}$ at the LHC	JULSON, Dale Adam
5:15 PM	[366] $U(1)_{T3R}$ extension of Standard Model	GHOSH, Sumit
5:30 PM	[228] Non-Abelian Vector Dark Matter and Lepton Anomalous Magnetic Moments	SAAD, shaikh

Beyond Standard Model: BSM 2G - Track G (4:15 PM - 6:00 PM)

-Conveners: Suho Kim; Ben Carlson; Bryan Field

time	[id] title	presenter
4:15 PM	[28] The REDTOP experiment: An eta/eta' factory to explore Physics Beyond the Standard Model	Dr GATTO, Corrado
4:30 PM	[336] Charged Particle Electric Dipole Moment Measurements at Storage Rings	SLIM, Jamal
4:45 PM	[375] Sensitivity studies of Dark Matter and CP Violation at REDTOP	Dr MAZZACANE, Anna
5:00 PM	[118] Probing Extremely Weakly-Interacting Particles in Gamma Factory	CHAKRABORTI, Sreemanti
5:15 PM	[44] Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions at $\sqrt{s} = 13$ TeV	TURKCAPAR, Semra
5:30 PM	[399] Neutrinophilic Scalars at the LHC Forward Physics Facility	TUCKLER, Douglas

Beyond Standard Model: BSM 2L - Track L (4:15 PM - 5:45 PM)

-Conveners: Andrew Warren Askew; Doreen Wackerroth; Jeff Dandoy

time	[id] title	presenter
4:15 PM	[11] Color-octet scalars in Dirac gaugino models with broken R symmetry	Mr MURPHY, Taylor
4:30 PM	[13] Confronting muon g-2 in SUSY GUTs with LHC-Run3 and Dark Matter Experiments	UN, Cem Salih
4:45 PM	[20] A Supersymmetric Flavor Clockwork	GADAM, Sri Aditya
5:00 PM	[29] New bounds on sneutrino masses through collider searches	GILMER, Humberto
5:15 PM	[98] Exploring color-octet scalar parameter space in minimal R-symmetric models	SMYLIE, Matthew
5:30 PM	[383] Electroweak pMSSM Reinterpretation of ATLAS Searches for SUSY	OZA, Nupur

Tuesday, July 13, 2021

Beyond Standard Model: BSM 3A - Track A (2:30 PM - 4:00 PM)

-Conveners: Elodie Deborah Resseguie; Meenakshi Narain

time	[id] title	presenter
2:30 PM	[110] Searches for new resonances decaying to at least one top quark in pp collisions at a center-of-mass energy of 13 TeV.	PATHAK, Atanu
2:45 PM	[199] Search for di-jet resonances along with an isolated charged lepton at $\sqrt{s} = 13$ TeV p-p collision with the ATLAS detector	Dr ISLAM, Wasikul
3:00 PM	[376] Searches for new resonant phenomena in final states with two quarks using the ATLAS detector	KHODA, Elham E
3:15 PM	[208] Search for heavy resonances decaying into a W boson and a Higgs boson in final states with leptons and b-jets in 139 fb ⁻¹ of pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector	VESELLA, Makayla
3:30 PM	[241] Search for $W^{\prime} \rightarrow tb$ in the all-hadronic final state with the ATLAS detector	LIN, Kuan-Yu
3:45 PM	[442] Search for electroweak production of charginos and neutralinos in final states with two boosted hadronically decaying bosons and missing transverse momentum in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector	MULLIN, Joseph

Beyond Standard Model: BSM 3G - Track G (2:30 PM - 4:00 PM)

-Conveners: Marco Montella; Todd Adams

time	[id] title	presenter
2:30 PM	[60] Searches for long-lived particles with the CMS experiment	DI PETRILLO, Karri Folan
2:45 PM	[175] Reinterpretation of the ATLAS Search for Displaced Hadronic Jets with the RECAST Framework	PROFFITT, Mason
3:00 PM	[204] Triggering long-lived particles in HL-LHC and the challenges in the first stage of the trigger system	SOLANKI, Prabhat
3:15 PM	[359] Jet Timing for LLP Searches	CHIU, Wen Han
3:30 PM	[24] New signatures of decaying HNLs in large scale detectors	PLESTID, Ryan
3:45 PM	[201] ATLAS Search for Non-Pointing and Delayed Photons	MAHON, Devin

Beyond Standard Model: BSM 3L - Track L (2:30 PM - 4:00 PM)

-Conveners: Jeff Dandoy; Evelyn Jean Thomson

time	[id] title	presenter
2:30 PM	[168] Search for Dark Matter produced in association with a Higgs boson decaying to a pair of b quarks at 13 TeV with the ATLAS detector	PHAM, Tuan Minh
2:45 PM	[119] Search for a Generic Heavy Higgs Boson at ATLAS	VU, Carter Cheney
3:00 PM	[172] Search for charged Higgs bosons decaying via $H^{\pm} \rightarrow \tau^{\pm} \nu_{\tau}$ in the τ +jets and τ +lepton final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS experiment	PARRISH, Elliot

3:15 PM	[182] Search for Heavy (pseudo)Higgs boson A/H produced in association with a top-antitop quark pair leading to the final state with four top quarks in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	TSAI, Meng-Ju
3:30 PM	[149] Search for Charged Higgs decaying into a top and bottom quark with a single leptonic final state	LUO, Jingyu
3:45 PM	[154] Search for a Light Pseudoscalar Higgs Boson in the Two Higgs Doublet Model using Data from the Large Hadron Collider (LHC)	HABIBULLAH, Redwan Md

Beyond Standard Model: BSM 4A - Track A (4:15 PM - 5:45 PM)

-Conveners: Alexis Plascencia; Marc Sher

time	[id] title	presenter
4:15 PM	[122] Some reflexions on hidden features of SM extensions with scalar triplets	GONÇALVES, Bernardo
4:30 PM	[259] Multi-TeV Signals of Baryogenesis in Higgs Troika Model	SULLIVAN, Matthew
4:45 PM	[333] Prospects of light charged scalars in a three Higgs doublet model with Z_3 symmetry	LEVY, Miguel
5:00 PM	[69] Search for Light Pseudoscalar Boson in the Composite Higgs Model using the CMS Detector	WULANSATITI, Muti
5:15 PM	[357] Charged Higgs Prospects In Extended Gauge Models	Mr SARKAR , Agnivo
5:30 PM	[273] Benchmarks from the Two Real Singlet Extension	ROBENS, Tania Natalie

Beyond Standard Model: BSM 4G - Track G (4:15 PM - 5:45 PM)

-Conveners: Marco Montella; Meenakshi Narain

time	[id] title	presenter
4:15 PM	[443] Search for Low Mass Dark Photons in the CMS Hadronic Calorimeter (HCAL) in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV	YAO, Yao
4:30 PM	[64] Track-Based Triggers for Long-Lived Particles at Future Colliders	FARR, Jesse Nicole
4:45 PM	[368] Searching for Long-Lived Dark Photons with the Heavy Photon Search Experiment	SOLT, Matthew
5:00 PM	[192] A last chance for kinetic mixing: Explaining $(g-2)_{\mu}$ with semi-visible dark photons	HOSTERT, Matheus
5:15 PM	[251] Axion-like Particle Searches in the Laboratory	THOMPSON, Adrian Raphael
5:30 PM	[74] The Earth as a transducer for dark-photon dark-matter detection	KALIA, Saarik

Wednesday, July 14, 2021

Beyond Standard Model: BSM 5A - Track A (2:30 PM - 4:00 PM)

-Conveners: Jeff Dandoy; Evelyn Jean Thomson

time	[id] title	presenter
2:30 PM	[18] Viable Full Unification of the Standard Model into E_8	J. DE ANDA N., Francisco
2:45 PM	[301] Majorana neutrino masses by D-brane instanton effects and Modular transformations	Mr HOSHIYA, Kouki
3:00 PM	[257] Parity, not Peccei-Quinn, to Solve Strong CP	MCCUNE, Amara
3:15 PM	[253] Metaplectic Flavor Symmetries from Magnetized Torus	KNAPP-PEREZ, Victor
3:30 PM	[232] Photophilic hadronic axion from heavy magnetic monopoles	SOKOLOV, Anton
3:45 PM	[250] Yukawa couplings from magnetized tori	Ms SHUKLA, Shreya

Beyond Standard Model: BSM 5G - Track G (2:30 PM - 4:00 PM)

-Conveners: Alexis Plascencia; Marc Sher

time	[id] title	presenter
2:30 PM	[298] Diluting SUSY flavour problem on the Landscape	LAMBA, Priyanka
2:45 PM	[49] The R-parity Violating Decays of Charginos and Neutralinos in the B-L MSSM	DUMITRU, Sebastian
3:00 PM	[48] Explicit Soft Supersymmetry Breaking in the Heterotic M-Theory B-L MSSM	DUMITRU, Sebastian
3:15 PM	[123] Probing the minimal $U(1)_{\square}$ model at future lepton colliders via the fermion pair-production channel	DAS, Arindam
3:30 PM	[103] Electroweak Symmetry Non-restoration in UV-complete Models with New Fermions	NG, Yu Hang
3:45 PM	[296] Lorentz violation in the quark sector	SHERRILL, Nathan LUNGHI, Enrico VIEIRA, Alexandre KOSTELECKY, Alan SZCZEPANIAK, Adam

Beyond Standard Model: BSM 5L - Track L (2:30 PM - 4:00 PM)

-Conveners: Wasikul Islam; Ian Lewis

time	[id] title	presenter
2:30 PM	[75] TeV-scale Lepton Number Violation: $0\nu\beta\beta$ -decay, the origin of matter and energy frontier probes	URRUTIA-QUIROGA, Sebastian
2:45 PM	[99] SM Extension with Anomaly Free Flavor $U(1)$	Prof. TAVARTKILADZE, Zurab
3:00 PM	[125] A genuine fermionic quintuplet seesaw model: phenomenological introduction	Mr ASHANUJJAMAN, Saiyad
3:15 PM	[283] Muonium-antimuonium oscillations in effective field theory	CONLIN, Renae
3:30 PM	[386] Muon conversions with flavor changing Rayleigh operators	GRANT, Cody
3:45 PM	[300] A fresh look at proton decay in SUSY $SU(5)$	LAMBA, Priyanka

Beyond Standard Model: BSM 6A - Track A (4:15 PM - 5:45 PM)**-Conveners: Zhen Liu; Karri Folan Di Petrillo**

time	[id] title	presenter
4:15 PM	[266] Measurement of proton and deuteron electric dipole moments using the prototype electric dipole moment ring (PTR)	Prof. TALMAN, Richard
4:30 PM	[276] A Neutron-induced Background Mitigation Study for Axion-like Particle Search at Rare Nuclear Isotope Accelerator Facilities	Dr JANG, Wooyoung
4:45 PM	[244] Axion-like Particle Searches at Rare Nuclear Isotope Accelerator Facilities	KIM, Doojin
5:00 PM	[40] A Novel Approach to Unsupervised Learning for Anomalous Jet Identification with a Variational Recurrent Neural Network	GONSKI, Julia Lynne
5:15 PM	[169] Study of energy deposition patterns in hadron calorimeter for prompt and displaced jets using convolutional neural network	Ms SENGUPTA, Rhitaja
5:30 PM	[178] Designing adversarial machine learning techniques to tag displaced jets in the ATLAS calorimeter	CORMIER, Felix

Beyond Standard Model: BSM 6G - Track G (4:15 PM - 5:45 PM)**-Conveners: Nathaniel Craig**

time	[id] title	presenter
4:15 PM	[177] Searching for a new leptophilic vector boson Z' with four-muon final state with the ATLAS detector	ZHANG, Shuzhou
4:30 PM	[380] Search for heavy fermionic partner of the top quark with charge $5/3$ in the single leptonic channel using CMS Run 2 Data	SIMPSON, Farrah
4:45 PM	[224] Search for invisible decays of the Higgs boson and for dark matter with the ATLAS detector	WEI, Chuanshun
5:00 PM	[286] Recent Astroparticle and Beyond the Standard Model Results from MicroBooNE	LEPETIC, Ivan
5:15 PM	[131] Search for Dark Matter with 2HDM+pseudoscalar model with the ATLAS detector	WANG, Zirui
5:30 PM	[271] The THDMa and possible e^+e^- signatures	ROBENS, Tania Natalie

Beyond Standard Model: BSM 6L - Track L (4:15 PM - 5:45 PM)**-Conveners: Wasikul Islam; Marc Sher**

time	[id] title	presenter
4:15 PM	[85] Space-Time Conjunction	TOY, Bruce
4:30 PM	[200] The structure of an electron and calculation the actual energy of that	Prof. SALEH, Gh.
4:45 PM	[21] Extending QED to Interactions of the Full Eight-Component Vacuum Wavefunction of the Geometric Representation of Clifford Algebra	CAMERON, peter
5:00 PM	[56] QED Model of Massless Neutrino Oscillation in the Geometric Representation of Clifford Algebra	CAMERON, peter
5:15 PM	[287] Unifying Gravity and Electromagnetism	DRAY, Matt
5:30 PM	Break	