# 2019 Meeting of the Division of Particles & Fields of the American Physical Society

# **Monday 29 July 2019**

#### Computing, Analysis Tools, & Data Handling: IRIS-HEP Tutorial - Shillman 425 (14:00 - 15:30)

-Conveners: Jim Pivarski; Mike Hildreth; Bo Jayatilaka; Michael Kirby; Peter Onyisi; Nick Smith

time [id] title presenter

14:00 [481] IRIS-HEP Tutorial: Fast columnar data analysis with data science tools	PIVARSKI, Jim
(Part 1)	SMITH, Nick

#### Computing, Analysis Tools, & Data Handling: IRIS-HEP Tutorial - Shillman 425 (16:00 - 18:00)

 $\hbox{-}Conveners: Michael Kirby; Nick Smith; Peter Onyisi; Mike Hildreth; Jim Pivarski; Bo Jayatilaka$ 

time [id] title presenter

16:00 [482] IRIS-HEP Tutorial: Fast columnar data analysis with data science tools	PIVARSKI, Jim
(Part 2)	SMITH, Nick

# Tuesday 30 July 2019

## Computing, Analysis Tools, & Data Handling - Shillman 425 (14:00 - 15:30)

-Conveners: Michael Kirby; Mike Hildreth; Bo Jayatilaka; Peter Onyisi

time	[id] title	presenter
14:00	[10] COFFEA - Columnar Object Framework For Effective Analysis	SMITH, Nick
	[205] Combined Neyman-Pearson Chi-square: an improved approximation to the Poisson-likelihood chi-square	Dr Jl, Xiangpan
	[24] pyhf: a pure Python statistical fitting library from the high energy physics community with tensors and autograd	STARK, Giordon Holtsberg
15:00	[396] Extending RECAST for truth-level analysis reinterpretations	SCHUY, Alexander Joseph

# Wednesday 31 July 2019

### Computing, Analysis Tools, & Data Handling - Shillman 425 (14:00 - 15:30)

-Conveners: Mike Hildreth; Michael Kirby; Bo Jayatilaka; Peter Onyisi

time [id] title		presenter
14:00 [107] ACTS: a common tra	ack reconstruction software	Dr AI, Xiaocong
14:20 [209] Deep Learning for Ev	vent Reconstruction at DUNE	BIAN, Jianming
14:40 [135] End-to-end particle a with CMS Open Data	and event identification at the Large Hadron Collider	USAI, Emanuele
15:00 [164] HEP.TrkX Charged F	Particle Tracking using Graph Neural Networks	JU, Xiangyang

## Computing, Analysis Tools, & Data Handling - Shillman 425 (16:00 - 18:00)

-Conveners: Michael Kirby; Bo Jayatilaka; Peter Onyisi; Mike Hildreth

time	[id] title	presenter
16:00	[224] Recent progress on Wire-Cell 3D imaging and tracking for LArTPC	Dr WEI, Hanyu
16:20	[247] Simulating light in large volume detectors using Metropolis Light Transport	COLLIN, Gabriel
16:40	[270] Supervised learning of Photo-Electron counting in scintillator-based dark matter experiments	Dr BHATTACHARYA, Kolahal BHATTACHARYA, Kolahal
17:00	[118] Determination of CMS Barrel Test Beam Calorimeter Reponse Correction to Pion Beams with Convolutional Neural Networks	LI, Daniel
17:20	[355] Fast detector modeling using machine learning algorithms	HOPKINS, Walter
17:40	[410] Electron Neutrino Energy Reconstruction with Convolutional Neural Network	YU, Shiqi

## **Thursday 1 August 2019**

### Computing, Analysis Tools, & Data Handling - Shillman 425 (14:00 - 15:30)

-Conveners: Peter Onyisi; Bo Jayatilaka; Michael Kirby; Mike Hildreth

time	[id] title	presenter
14:00	[114] Tools for Trigger Rate Monitoring at CMS	MOHRMAN, Kelci
	[124] The migration of the ATLAS electron photon trigger software to the AthenaMT	Mr BAKSHI GUPTA, Debottam
	[81] Application of Quantum Machine Learning to High Energy Physics Analysis at LHC using IBM Quantum Computer Simulators and IBM Quantum Computer Hardware	WANG, Alex Zeng
15:00	[369] Noise Filtering and Signal Processing in the ProtoDUNE-SP LArTPC	SARASTY SEGURA, Carlos

#### Computing, Analysis Tools, & Data Handling - Shillman 425 (16:00 - 18:00)

-Conveners: Michael Kirby; Mike Hildreth; Peter Onyisi; Bo Jayatilaka

time	[id] title	presenter
	[145] Computing and Machine Learning for Detector R&D (Summary of CPAD2018)	GLEYZER, Sergei
16:20	[137] Software Upgrades for the HL-LHC and HEP in the 2020s	ELMER, Peter
16:40	[319] Evolving CMS offline computing towards LHC Run3 and HL-LHC	LANGE, David
17:00	[239] Large-scale HPC deployment of Scalable CyberInfrastructure for Artificial Intelligence and Likelihood Free Inference (SCAILFIN)	HILDRETH, Mike HURTADO ANAMPA, Kenyi Paolo