



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

## Monday, July 29, 2019

### Computing, Analysis Tools, & Data Handling: IRIS-HEP Tutorial - Shillman 425 (2:00 PM - 3:30 PM)

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

time	[id] title	presenter
2:00 PM	[481] IRIS-HEP Tutorial: Fast columnar data analysis with data science tools (Part 1)	PIVARSKI, Jim SMITH, Nick

### Computing, Analysis Tools, & Data Handling: IRIS-HEP Tutorial - Shillman 425 (4:00 PM - 6:00 PM)

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

time	[id] title	presenter
4:00 PM	[482] IRIS-HEP Tutorial: Fast columnar data analysis with data science tools (Part 2)	PIVARSKI, Jim SMITH, Nick

## Tuesday, July 30, 2019

### Computing, Analysis Tools, & Data Handling - Shillman 425 (2:00 PM - 3:30 PM)

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

time	[id] title	presenter
2:00 PM	[10] COFFEA - Columnar Object Framework For Effective Analysis	SMITH, Nick
2:20 PM	[205] Combined Neyman-Pearson Chi-square: an improved approximation to the Poisson-likelihood chi-square	Dr Ji, Xiangpan
2:40 PM	[24] pyhf: a pure Python statistical fitting library from the high energy physics community with tensors and autograd	STARK, Giordon Holtsberg
3:00 PM	[396] Extending RECAST for truth-level analysis reinterpretations	SCHUY, Alexander Joseph

# Wednesday, July 31, 2019

## Computing, Analysis Tools, & Data Handling - Shillman 425 (2:00 PM - 3:30 PM)

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

time	[id] title	presenter
2:00 PM	[107] ACTS: a common track reconstruction software	Dr AI, Xiaocong
2:20 PM	[209] Deep Learning for Event Reconstruction at DUNE	BIAN, Jianming
2:40 PM	[135] End-to-end particle and event identification at the Large Hadron Collider with CMS Open Data	USAI, Emanuele
3:00 PM	[164] HEP.TrkX Charged Particle Tracking using Graph Neural Networks	JU, Xiangyang

## Computing, Analysis Tools, & Data Handling - Shillman 425 (4:00 PM - 6:00 PM)

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

time	[id] title	presenter
4:00 PM	[224] Recent progress on Wire-Cell 3D imaging and tracking for LArTPC	Dr WEI, Hanyu
4:20 PM	[247] Simulating light in large volume detectors using Metropolis Light Transport	COLLIN, Gabriel
4:40 PM	[270] Supervised learning of Photo-Electron counting in scintillator-based dark matter experiments	Dr BHATTACHARYA, Kolahal BHATTACHARYA, Kolahal
5:00 PM	[118] Determination of CMS Barrel Test Beam Calorimeter Reponse Correction to Pion Beams with Convolutional Neural Networks	LI, Daniel
5:20 PM	[355] Fast detector modeling using machine learning algorithms	HOPKINS, Walter
5:40 PM	[410] Electron Neutrino Energy Reconstruction with Convolutional Neural Network	YU, Shiqi

# Thursday, August 1, 2019

## Computing, Analysis Tools, & Data Handling - Shillman 425 (2:00 PM - 3:30 PM)

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

time	[id] title	presenter
2:00 PM	[114] Tools for Trigger Rate Monitoring at CMS	MOHRMAN, Kelci
2:20 PM	[124] The migration of the ATLAS electron photon trigger software to the AthenaMT	Mr BAKSHI GUPTA, Debottam
2:40 PM	[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
3:00 PM	[369] Noise Filtering and Signal Processing in the ProtoDUNE-SP LArTPC	SARASTY SEGURA, Carlos

## Computing, Analysis Tools, & Data Handling - Shillman 425 (4:00 PM - 6:00 PM)

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

time	[id] title	presenter
4:00 PM	[145] Computing and Machine Learning for Detector R&D (Summary of CPAD2018)	GLEYZER, Sergei
4:20 PM	[137] Software Upgrades for the HL-LHC and HEP in the 2020s	ELMER, Peter
4:40 PM	[319] Evolving CMS offline computing towards LHC Run3 and HL-LHC	LANGE, David
5:00 PM	[239] Large-scale HPC deployment of Scalable CyberInfrastructure for Artificial Intelligence and Likelihood Free Inference (SCAILFIN)	HILDRETH, Mike HURTADO ANAMPA, Kenyi Paolo