

CHEP 2016 Conference, San Francisco, October 8-14, 2016

Monday 10 October 2016

Track 5: Software Development: 5.1 - Chair: Steffen Luitz - Sierra A (11:00-12:30)

-Conveners: Florian Uhlig; Alberto Aimar; Concetta Cartaro

| time | [id] title | presenter |
|-------|---|------------------|
| 11:00 | [61] Model-independent partial wave analysis using a massively-parallel fitting framework | SUN, Liang |
| 11:15 | [100] PODIO - Applying plain-old-data for defining physics data models | |
| 11:30 | [237] Tracking Machine Learning Challenge | CALAFIURA, Paolo |
| 11:45 | [552] Using computing models from particle physics to investigate dose-toxicity correlations in cancer radiotherapy | HARRISON, Karl |
| 12:00 | [554] Deep-Learning Analysis Pipelines on Raw HEP Data from the Daya Bay Neutrino Experiment at NERSC | KOHN, Samuel |
| 12:15 | [562] Neutrino Identification With A Convolutional Neural Network in the NOvA Detectors | PSIHAS, Fernanda |

Track 5: Software Development: 5.2 - Chair: Andreas Petzold - Sierra A (14:00-16:00)

-Conveners: Alberto Aimar; Concetta Cartaro; Florian Uhlig

| time | [id] title | presenter |
|-------|---|--|
| 14:00 | [157] Status and Evolution of ROOT | NAUMANN, Axel |
| 14:15 | [156] ROOT and new programming paradigms | CANAL, Philippe |
| 14:30 | [110] Optimizing ROOT's Performance Using C++ Modules | CANAL, Philippe VASILEV, Vasil Georgiev |
| 14:45 | [258] Expressing Parallelism in ROOT | TEJEDOR SAAVEDRA, Enric |
| 15:00 | [260] The New ROOT Interface: Jupyter Notebooks | PIPARO, Danilo TEJEDOR SAAVEDRA, Enric |
| 15:15 | [321] New Machine Learning Developments in ROOT | Dr GLEYZER, Sergei |
| 15:30 | [502] Exploring Compression Techniques for ROOT IO | ZHE, Zhang |
| 15:45 | [9] RootJS: Node.js Bindings for ROOT 6 | Dr SZUBA, Marek |

Tuesday 11 October 2016

Track 5: Software Development: 5.3 - Chair: Jakob Blomer - GG A+B (11:00-12:30)

-Conveners: Florian Uhlig; Alberto Aimar; Concetta Cartaro

| time | [id] title | presenter |
|-------|---|-------------------|
| 11:00 | [77] Identifying memory allocation patterns in HEP software | KAMA, Sami |
| 11:15 | [158] Computing Performance of GeantV Physics Models | JUN, Soon Yung |
| 11:30 | [149] How To Review 4 Million Lines of ATLAS Code | STEWART, Graeme |
| 11:45 | [222] Application of econometric and ecology analysis methods in physics software | PIA, Maria Grazia |
| 12:00 | [229] First results from a combined analysis of CERN computing infrastructure metrics | KEEBLE, Oliver |

Track 5: Software Development: 5.4 - Chair: Malachi Schram - GG A+B (14:00-15:30)

-Conveners: Alberto Aimar; Concetta Cartaro; Florian Uhlig

| time | [id] title | presenter |
|-------|---|----------------------------------|
| 14:00 | [80] A Comparison of Deep Learning Architectures with GPU Acceleration and Their Applications | Dr ZHU, Jianlin Dr HUANG, Jin |
| 14:15 | [161] Multi-threaded Geant4 on Intel Many Integrated Core architectures | DOTTI, Andrea |
| 14:30 | [484] Investigations of Future Computing Platforms for High Energy Physics | |
| 14:45 | [525] Challenges in Scaling NLO Generators to Leadership Computers | CHILDERS, Taylor |
| 15:00 | [349] A programming framework for data streaming on the Xeon Phi | CHAPELAND, Sylvain |

Wednesday 12 October 2016

Track 5: Software Development: 5.5 - Chair: Alberto Aimar - GG A+B (11:15-13:00)

-Conveners: Florian Uhlig; Alberto Aimar; Concetta Cartaro

| time | [id] title | presenter |
|-------|--|--------------------------|
| 11:15 | [62] CERN openlab Researched Technologies That Might Become Game Changers in Software Development | RADEMAKERS, Fons |
| 11:30 | [306] Software Quality Control at Belle II | Dr RITTER, Martin |
| 11:45 | [316] Design and Execution of make-like distributed Analyses based on Spotify's Pipelining Package luigi | RIEGER, Marcel |
| 12:00 | [393] Accelerating Navigation in the VecGeom Geometry Modeller | WENZEL, Sandro Christian |
| 12:15 | [413] Machine Learning with TensorFlow as an alternative to TMVA | Prof. SEVIOR, Martin |
| 12:30 | [436] Parallel Monte Carlo search for Hough transform | HOBSON, Peter |

Thursday 13 October 2016

Track 5: Software Development: 5.6 - Chair: Andrea Dotti - GG A+B (11:00-12:30)

-Conveners: Florian Uhlig; Alberto Aimar; Concetta Cartaro

| time | [id] title | presenter |
|-------|---|-------------------------|
| 11:00 | [114] Events visualisation in ALICE - current status and strategy for Run 3 | NIEDZIELA, Jeremi |
| 11:15 | [117] An interactive and comprehensive working environment for high-energy physics software with Python and jupyter notebooks | Dr HAUTH, Thomas |
| 11:30 | [216] Event visualisation in ATLAS: current software technologies / future prospects and trends | BIANCHI, Riccardo Maria |
| 11:45 | [449] A browser-based event display for the CMS Experiment at the LHC using WebGL | MC CAULEY, Thomas |
| 12:00 | [561] Integrating Visualization Applications, such as ParaView, into HEP Software Frameworks for In-situ Event Displays | JONES, Christopher |
| 12:15 | [470] Everware toolkit - supporting reproducible science and challenge driven education | USTYUZHANIN, Andrey |

Track 5: Software Development: 5.7 - Chair: Marcus Ebert - GG A+B (14:00-15:30)

-Conveners: Alberto Aimar; Concetta Cartaro; Florian Uhlig

| time | [id] title | presenter |
|-------|--|--|
| 14:00 | [360] "Big Data" in HEP: A comprehensive use case study | GUTSCHE, Oliver |
| 14:15 | [69] Big Data Analytics for the Future Circular Collider Reliability and Availability Studies | BEGY, Volodimir |
| 14:30 | [176] XRootD Popularity on Hadoop Clusters | MENICHETTI, Luca MEONI, Marco MAGINI, Nicolo |
| 14:45 | [231] Hadoop and friends - first experience at CERN with a new platform for high throughput analysis steps | KOTHURI, Prasanth |
| 15:00 | [215] Big Data Analytics Tools as Applied to ATLAS Event Data | VUKOTIC, Ilija |
| 15:15 | [263] Developing and optimizing applications for the Hadoop environment | KOTHURI, Prasanth |