

Joint WLCG & HSF Workshop 2018



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome and Introduction

Monday, March 26, 2018 10:00 AM (20 minutes)

Presenters: DORIA, Alessandra (INFN, Napoli (IT)); Prof. MANFREDI, Gaetano (Federico II University)

Session Classification: Opening Plenary Session

Contribution ID: 2

Type: **not specified**

HEP science goals for the next decade

Monday, March 26, 2018 10:20 AM (20 minutes)

Presenter: SEXTON-KENNEDY, Elizabeth (Fermi National Accelerator Lab. (US))

Session Classification: Opening Plenary Session

Contribution ID: 3

Type: **not specified**

US NSF and DOE current activities and plans

Monday, March 26, 2018 11:35 AM (20 minutes)

Presenters: ELMER, Peter (Princeton University (US)); CHILDERS, Taylor (Argonne National Laboratory (US))

Session Classification: Opening Plenary Session

Contribution ID: 4

Type: **not specified**

Simulation for HEP (TBC)

Session Classification: HEP Use Cases

Contribution ID: 5

Type: **not specified**

HSF Vision for the Future

Session Classification: Plenaries

Contribution ID: 6

Type: **not specified**

WLCG Vision for the Future

Session Classification: Plenaries

Contribution ID: 7

Type: **not specified**

WG Summaries

Session Classification: Plenaries

Contribution ID: 8

Type: **not specified**

Buses for Napoli Capodichino Airport and Rome Fiumicino Airport

Thursday, March 29, 2018 1:00 PM (5 minutes)

Contribution ID: 9

Type: **not specified**

CWP Roadmap

Monday, March 26, 2018 10:55 AM (40 minutes)

Presenter: RODRIGUES, Eduardo (University of Cincinnati (US))

Session Classification: Opening Plenary Session

Contribution ID: **10**

Type: **not specified**

Institute welcome

Session Classification: Opening Plenary Session

Contribution ID: **11**

Type: **not specified**

Discussion

Monday, March 26, 2018 11:55 AM (35 minutes)

Session Classification: Opening Plenary Session

Contribution ID: 13

Type: **not specified**

Introduction

Tuesday, March 27, 2018 9:00 AM (5 minutes)

Presenters: GIRONE, Maria (CERN); CAMPANA, Simone (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 14

Type: **not specified**

Highlights of the Rucio workshop

Tuesday, March 27, 2018 9:05 AM (20 minutes)

Presenters: LASSNIG, Mario (CERN); BARISITS, Martin (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 15

Type: **not specified**

Data Lakes R&D: high level goals

Tuesday, March 27, 2018 9:40 AM (15 minutes)

Presenter: ESPINAL CURULL, Xavier (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 16

Type: **not specified**

Performance metrics and measurements in the Data Lake model

Session Classification: Common Data Management and Data Lakes

Contribution ID: 17

Type: **not specified**

A Transfer Ecosystem for the WLCG

Tuesday, March 27, 2018 9:55 AM (15 minutes)

Presenter: BOCKELMAN, Brian Paul (University of Nebraska Lincoln (US))

Session Classification: Common Data Management and Data Lakes

Contribution ID: **18**

Type: **not specified**

Distributed Storage and Data Lakes: ideas from dCache experts

Wednesday, March 28, 2018 4:20 PM (20 minutes)

Presenters: FUHRMANN, Patrick (Deutsches Elektronen-Synchrotron (DE)); Mr MKRTCHYAN, Tigran (DESY)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 19

Type: **not specified**

Distributed Storage and Data Lakes: ideas from EOS experts

Wednesday, March 28, 2018 4:00 PM (20 minutes)

Presenter: PETERS, Andreas Joachim (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 20

Type: **not specified**

Using Capability-based authorization for HTTP-based Third Party Copies

Wednesday, March 28, 2018 4:50 PM (20 minutes)

Presenter: BOCKELMAN, Brian Paul (University of Nebraska Lincoln (US))

Session Classification: Common Data Management and Data Lakes

Contribution ID: 21

Type: **not specified**

data access and data transfer protocols

Session Classification: Common Data Management and Data Lakes

Contribution ID: 22

Type: **not specified**

caching technologies: HTTP caches

Wednesday, March 28, 2018 5:50 PM (15 minutes)

Presenter: PARDI, Silvio (INFN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 23

Type: **not specified**

Lightning Talk 2 (Belle II)

Tuesday, March 27, 2018 1:40 PM (10 minutes)

Presenters: Dr RITTER, Martin (LMU / Cluster Universe); RITTER, Martin (LMU Munich); Dr TBD

Session Classification: Training and Careers

Contribution ID: 24

Type: **not specified**

Evolution of technology and markets

Monday, March 26, 2018 1:30 PM (40 minutes)

Author: PANZER-STEINDEL, Bernd (CERN)

Presenter: PANZER-STEINDEL, Bernd (CERN)

Session Classification: Technology Watch

Contribution ID: 25

Type: **not specified**

Q&A, discussion

Session Classification: Technology Watch

Contribution ID: 26

Type: **not specified**

Proposal for technology watch WG

Monday, March 26, 2018 2:50 PM (20 minutes)

Author: MEINHARD, Helge (CERN)

Presenter: MEINHARD, Helge (CERN)

Session Classification: Technology Watch

Contribution ID: 27

Type: **not specified**

Q&A, Discussion

Session Classification: Technology Watch

Contribution ID: 28

Type: **not specified**

Topics for R&D on technology watch

Monday, March 26, 2018 2:20 PM (30 minutes)

Author: PANZER-STEINDEL, Bernd (CERN)

Presenter: PANZER-STEINDEL, Bernd (CERN)

Session Classification: Technology Watch

Contribution ID: 29

Type: **not specified**

Q&A, Discussion

Session Classification: Technology Watch

Contribution ID: **30**

Type: **not specified**

Slot for sponsor talks (if approved)

Session Classification: Technology Watch

Contribution ID: **31**

Type: **not specified**

Overview of CWP paper from WG Data Analysis and Interpretation

Tuesday, March 27, 2018 4:00 PM (20 minutes)

Presenter: NEUBAUER, Mark (Univ. Illinois at Urbana Champaign (US))

Session Classification: Analysis Facilities and Use Cases

Contribution ID: 32

Type: **not specified**

Spark-like and query-like analysis systems and tools

Tuesday, March 27, 2018 4:20 PM (20 minutes)

Presenter: PIVARSKI, Jim (Princeton University)

Session Classification: Analysis Facilities and Use Cases

Contribution ID: 33

Type: **not specified**

HPC analyses

Tuesday, March 27, 2018 4:40 PM (20 minutes)

Presenter: KHRISTENKO, Viktor (CERN)

Session Classification: Analysis Facilities and Use Cases

Contribution ID: 34

Type: **not specified**

Real-time analyses - the LHCb case

Tuesday, March 27, 2018 5:00 PM (20 minutes)

Presenter: MATEV, Rosen (CERN)

Session Classification: Analysis Facilities and Use Cases

Contribution ID: 35

Type: **not specified**

Analyses with SWAN and docker

Tuesday, March 27, 2018 5:20 PM (20 minutes)

Presenter: MATO VILA, Pere (CERN)

Session Classification: Analysis Facilities and Use Cases

Contribution ID: 36

Type: **not specified**

Open discussion on future avenues and collaboration

Tuesday, March 27, 2018 5:40 PM (20 minutes)

Presenters: RODRIGUES, Eduardo (University of Cincinnati (US)); GUTSCHE, Oliver (Fermi National Accelerator Lab. (US))

Session Classification: Analysis Facilities and Use Cases

Contribution ID: 37

Type: **not specified**

Certification: Motivation, Benefits and Status

Tuesday, March 27, 2018 1:30 PM (20 minutes)

Presenters: SHIERS, Jamie (CERN); HILDRETH, Mike (University of Notre Dame (US)); HILDRETH, Mike (Department of Physics-College of Science-University of Notre Da)

Session Classification: Data Preservation for HEP

Contribution ID: 38

Type: **not specified**

How HL-LHC challenges inform WM R&D: ATLAS view

Tuesday, March 27, 2018 1:30 PM (20 minutes)

Presenters: DI GIROLAMO, Alessandro (CERN); COSTANZO, Davide (University of Sheffield (GB)); ELMSHEUSER, Johannes (Brookhaven National Laboratory (US)); WENAUS, Torre (Brookhaven National Laboratory (US))

Session Classification: Workload Management

Contribution ID: 39

Type: **not specified**

How HL-LHC challenges inform WM R&D: CMS view

Tuesday, March 27, 2018 1:50 PM (20 minutes)

Presenter: WUERHWEIN, Frank (UCSD)

Session Classification: Workload Management

Contribution ID: 40

Type: **not specified**

Roadmap towards WM standardization for HL-LHC: ARC perspective

Tuesday, March 27, 2018 2:10 PM (20 minutes)

Presenter: FILIPCIC, Andrej (Jozef Stefan Institute (SI))

Session Classification: Workload Management

Contribution ID: 41

Type: **not specified**

Roadmap towards WM standardization for HL-LHC: PanDA perspective

Tuesday, March 27, 2018 2:30 PM (20 minutes)

Presenters: KLIMENTOV, Alexei (Brookhaven National Laboratory (US)); DE, Kaushik (University of Texas at Arlington (US))

Session Classification: Workload Management

Contribution ID: 42

Type: **not specified**

Trust & Policies

Wednesday, March 28, 2018 1:30 PM (25 minutes)

GDPR Implications + Policy Harmonisation

Presenter: KELSEY, David (Science and Technology Facilities Council STFC (GB))

Session Classification: Security

Contribution ID: 43

Type: **not specified**

Authentication and Authorisation

Wednesday, March 28, 2018 1:55 PM (25 minutes)

Authorisation Working Group Status

Presenter: LITMAATH, Maarten (CERN)

Session Classification: Security

Contribution ID: 44

Type: **not specified**

Operational Security

Wednesday, March 28, 2018 2:20 PM (40 minutes)

- Requirements for operational security in the future
- Incident Response in new infrastructures
- Threat Intelligence
- Technology (inc. SOC WG status)
- Traceability
- IPv6 Security Aspects

Presenters: CROOKS, David (University of Glasgow (GB)); BRILLAULT, Vincent (CERN)

Session Classification: Security

Contribution ID: 45

Type: **not specified**

Discussion

Wednesday, March 28, 2018 3:00 PM (30 minutes)

Session Classification: Security

Contribution ID: 46

Type: **not specified**

Visualization CWP paper status

Wednesday, March 28, 2018 11:00 AM (5 minutes)

Presenters: BIANCHI, Riccardo Maria (University of Pittsburgh (US)); MC CAULEY, Thomas (University of Notre Dame (US))

Session Classification: Visualisation

Contribution ID: 47

Type: **not specified**

Project Discussion: Intro.

Wednesday, March 28, 2018 11:05 AM (10 minutes)

A summary of what we proposed in the CWP in terms of common development work for the future and how we can proceed:

- potential common base packages
- server-client architecture as a possible solution to circumvent the issues of data access (in-framework tools) and limited/skimmed data (standalone tools)

Presenters: BIANCHI, Riccardo Maria (University of Pittsburgh (US)); MC CAULEY, Thomas (University of Notre Dame (US))

Session Classification: Visualisation

Contribution ID: 48

Type: **not specified**

ATLAS Open Data apps: bringing the interactivity of the website to the desktop

Wednesday, March 28, 2018 11:45 AM (15 minutes)

Presenter: SANCHEZ PINEDA, Arturo (Abdus Salam Int. Cent. Theor. Phys. (IT))

Session Classification: Visualisation

Contribution ID: 49

Type: **not specified**

Hybrid Rendering System for Particle Collision Experimental Data Visualization

Wednesday, March 28, 2018 11:15 AM (15 minutes)

The main problems in visualizing the particle collision events are the amount of data needed for good visualization and the need for high-performance graphical hardware. To overcome the need of sending the large amount of data to the end-user as well as need for high-performance graphical hardware, we propose the hybrid rendering solution which renders the final image in two parts: (1) highly interactive visualization of basic experiment geometry rendered on client side and (2) high quality render of event details, which is rendered on server side. The final render image is combined from both images with use of different fusing techniques using depth buffer or importance buffer. The proposed approach solves multiple issues: (1) the need for sending a large amount of data to the client for purpose of visualization, (2) the need for high-performance graphical hardware on the client side, (3) allows the use of more complex rendering techniques and (4) improves the interactivity of the visualization.

Speaker bio:

Ciril Bohak obtained his B.Sc., M.Sc., and Ph.D. in Computer and Information Science at the University of Ljubljana, Slovenia. His main research topics are Computer Graphics and Data Visualization. He is in charge of Med3D project - a web-based medical data visualization framework with support for remote collaboration and VR. He is also collaborating on LiDAR/LADAR point cloud data visualization with Kyungpook National University from South Korea.

Speaker's web page

Authors: Dr BOHAK, Ciril (University of Ljubljana, Faculty of Computer and Information Science); MAROLT, Matija (University of Ljubljana - Faculty of computer and information science)

Presenter: Dr BOHAK, Ciril (University of Ljubljana, Faculty of Computer and Information Science)

Session Classification: Visualisation

Contribution ID: 50

Type: **not specified**

New development in ROOT concerning web-based graphics, GUI and geometry display

Wednesday, March 28, 2018 11:30 AM (15 minutes)

Presenter: LINEV, Sergey

Session Classification: Visualisation

Contribution ID: 51

Type: **not specified**

FPGAs as co-processors for reconstruction

Wednesday, March 28, 2018 9:00 AM (20 minutes)

Presenter: FAERBER, Christian (CERN)

Session Classification: Programming for Concurrency and Co-Processors

Contribution ID: 52

Type: **not specified**

VecCore: Expressing HEP algorithms in terms of explicit SIMD types and operations

Wednesday, March 28, 2018 9:20 AM (20 minutes)

Presenter: GHEATA, Andrei (CERN)

Session Classification: Programming for Concurrency and Co-Processors

Contribution ID: 53

Type: **not specified**

Dask: distributed computing for scientific Python

Wednesday, March 28, 2018 9:40 AM (20 minutes)

Presenter: Dr DURANT, Martin (Anaconda, Inc.)

Session Classification: Programming for Concurrency and Co-Processors

Contribution ID: 54

Type: **not specified**

Hydra: distributing mathematical kernels over OpenMP, CUDA and TBB

Presenter: ALVES JUNIOR, Antonio Augusto (University of Cincinnati (US))

Session Classification: Programming for Concurrency and Co-Processors

Contribution ID: 55

Type: **not specified**

VecGeom in CMS, Muon g-2, Mu2e

Wednesday, March 28, 2018 4:40 PM (10 minutes)

Presenter: ELVIRA, Victor Daniel (Fermi National Accelerator Lab. (US))

Session Classification: Simulation

Contribution ID: 56

Type: **not specified**

Reducing CPU Consumption of Geant4 Simulation in ATLAS

Wednesday, March 28, 2018 2:10 PM (20 minutes)

Presenter: CHAPMAN, John Derek (University of Cambridge (GB))

Session Classification: Simulation

Contribution ID: 57

Type: **not specified**

Status and plans for the vectorised particle transport “demonstrator”

Wednesday, March 28, 2018 4:00 PM (20 minutes)

Presenter: POKORSKI, Witold (CERN)

Session Classification: Simulation

Contribution ID: 58

Type: **not specified**

Electromagnetic and Hadronic Physics requirements for detector simulation in 2020s

Wednesday, March 28, 2018 2:50 PM (20 minutes)

Presenter: Dr HARIRI, Farah (CERN)

Session Classification: Simulation

Contribution ID: 59

Type: **not specified**

Variance Reduction Techniques for HEP in Geant4

Presenter: VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Simulation

Contribution ID: **60**

Type: **not specified**

CaloGAN: a novel physics simulation with Neural Networks trained from Geant4 full-sims

Wednesday, March 28, 2018 5:10 PM (20 minutes)

Presenters: NACHMAN, Ben (University of California Berkeley (US)); DE OLIVEIRA, Luke; PAGANINI, Michela (Yale University (US))

Session Classification: Simulation

Contribution ID: **61**

Type: **not specified**

Towards modularization and vectorization of Geant4 physics: a pilot study

Wednesday, March 28, 2018 3:10 PM (20 minutes)

Presenter: KOI, Tatsumi (SLAC National Accelerator Laboratory (US))

Session Classification: Simulation

Contribution ID: **62**

Type: **not specified**

Use of HPC resources with Geant4 simulations

Wednesday, March 28, 2018 5:30 PM (20 minutes)

Presenter: DOTTI, Andrea (SLAC National Accelerator Laboratory (US))

Session Classification: Simulation

Contribution ID: **63**

Type: **not specified**

Performance metrics and measurements in the Data Lake model

Tuesday, March 27, 2018 10:10 AM (15 minutes)

Presenters: SCHOVANCOVA, Jaroslava (CERN); MCCANCE, Gavin (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 64

Type: **not specified**

First steps on simulation readout vectorization: LArSoft

Wednesday, March 28, 2018 5:50 PM (10 minutes)

Presenter: SNIDER, Erica (Fermilab)

Session Classification: Simulation

Contribution ID: 65

Type: **not specified**

CmsToyGV: Integration tests of GeantV in CMS software framework

Wednesday, March 28, 2018 4:20 PM (20 minutes)

Presenter: PEDRO, Kevin (Fermi National Accelerator Lab. (US))

Session Classification: Simulation

Contribution ID: 66

Type: **not specified**

Programming languages for frameworks: is C++ still the best choice?

Wednesday, March 28, 2018 4:30 PM (30 minutes)

Presenter: POPESCU, Radu (CERN)

Session Classification: Frameworks Technical Session

Contribution ID: 67

Type: **not specified**

Task Based Parallelism: TBB, HPX, Others?

Session Classification: Frameworks Technical Session

Contribution ID: **68**

Type: **not specified**

Overview of Serialization Technologies

Wednesday, March 28, 2018 4:00 PM (30 minutes)

Presenter: PIVARSKI, Jim (Princeton University)

Session Classification: Frameworks Technical Session

Contribution ID: **69**

Type: **not specified**

C++ Metaclasses for Framework Developers

Presenter: CLEMENCIC, Marco (CERN)

Session Classification: Frameworks Technical Session

Contribution ID: 70

Type: **not specified**

Overview of the Working Group, Mandate, Activities and Status

Wednesday, March 28, 2018 11:00 AM (30 minutes)

Mainly for non working group members. Intended to raise interest and stimulate contributions.

Presenter: FLIX MOLINA, Jose (Centro de Investigaciones Energéticas Medioambientales y Tecno)

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 71

Type: **not specified**

Importance of a common vocabulary

Short introduction of how we call things (workloads, workflows etc.)

Table of workloads (steps and chains) and the transformations that they do

Presenter: ANDREA SCIABA OR DANIELE TBC

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 72

Type: **not specified**

Most important workloads and how to run them

Wednesday, March 28, 2018 11:30 AM (15 minutes)

Reason why these workloads are “important” in matters of cost.

Focus on Run2 experience

Run3 and HL-LHC will be covered in the afternoon session

Summarise what we have, list of workloads

Overview of the experience gained running these workloads (especially from non experiment members view)

Presenter: ELMSHEUSER, Johannes (Brookhaven National Laboratory (US))

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 73

Type: **not specified**

Metrics and Measurements

Wednesday, March 28, 2018 11:45 AM (20 minutes)

The metrics relevant for the workloads.

Status of the measurement of these quantities for the different workloads.

More detailed discussions either in the afternoon session or during dedicated meetings

Presenter: ROY, Gareth Douglas (University of Glasgow (GB))

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 74

Type: **not specified**

Cost evaluation process

Wednesday, March 28, 2018 12:05 PM (20 minutes)

Mapping the cost model to site relevant costs
Walk through an simple example, motivation etc.

Afternoon: Concrete example calculations, where to go from here, discussions

Presenter: BISCARAT, Catherine (LPSC Grenoble, IN2P3/CNRS)

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 75

Type: **not specified**

Common resource calculation model: Brainstorming/Hackathon

Wednesday, March 28, 2018 2:50 PM (30 minutes)

How to estimate resource needs for run periods.
From several Excel sheets to a generic Python code with different configuration parameters by experiment.

Starting from a simplistic Python script (needs to be prepared)
Discussion and work on the code

Presenter: SARTIRANA, Andrea (Centre National de la Recherche Scientifique (FR))

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 76

Type: **not specified**

ALFA: Alice-Fair message queue based reconstruction and analysis framework

Tuesday, March 27, 2018 12:00 PM (30 minutes)

Presenter: KOLLEGER, Thorsten (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

Session Classification: Frameworks and Infrastructure

Contribution ID: 77

Type: **not specified**

CLARA: Clas12 Reconstruction and Analysis Framework

Tuesday, March 27, 2018 11:30 AM (30 minutes)

Presenter: GYURJYAN, Vardan (Jefferson Lab)

Session Classification: Frameworks and Infrastructure

Contribution ID: 78

Type: **not specified**

Tools and Techniques for Performance/Cost Measurements

Wednesday, March 28, 2018 1:30 PM (30 minutes)

A presentation of tools and techniques needed to measure the performance metrics.
15' presentation followed by 15' discussion

Presenter: VALASSI, Andrea (CERN)

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: 79

Type: **not specified**

Evolution of the critical workloads in Run3 and HL-LHC

Wednesday, March 28, 2018 2:00 PM (30 minutes)

Run3 and HL-LHC , What will change?

How can we “fake” in a more realistic way these conditions until we have the code that handles data for these periods?

Will there be an impact of the change of global architecture and what will it be, how can we quantify it?

Starting with a 3-4 slide introduction, then interactive work and discussion.

Presenter: LANGE, David (Princeton University (US))

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: **80**

Type: **not specified**

Cost evaluation process, example calculation

Wednesday, March 28, 2018 2:30 PM (20 minutes)

Walk through the example

Discussion on where to go from here

Presenter: VERNET, Renaud (Centre National de la Recherche Scientifique (FR))

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: **81**

Type: **not specified**

Threads to grids: distributed concurrency in athena/Gaudi

Tuesday, March 27, 2018 11:00 AM (30 minutes)

Presenter: Dr LEGGETT, Charles (Lawrence Berkeley National Lab (US))

Session Classification: Frameworks and Infrastructure

Contribution ID: **82**

Type: **not specified**

Summary, Follow up

Wednesday, March 28, 2018 3:20 PM (10 minutes)

First attempt at giving a high-level summary of the technical session

Presenter: SCHULZ, Markus (CERN)

Session Classification: Performance and Cost Modeling Introduction

Contribution ID: **83**

Type: **not specified**

Lightning Talk 1 (CMS/ATLAS)

Tuesday, March 27, 2018 1:30 PM (10 minutes)

Presenter: MALIK, Sudhir (University of Puerto Rico (PR))

Session Classification: Training and Careers

Contribution ID: **84**

Type: **not specified**

Lightning Talk 4 (Starterkit - LHCb)

Tuesday, March 27, 2018 2:00 PM (10 minutes)

Presenter: BELLEE, Violaine (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: Training and Careers

Contribution ID: 85

Type: **not specified**

Lightning Talk 5 (ALICE)

Tuesday, March 27, 2018 2:10 PM (10 minutes)

Presenter: BERZANO, Dario (CERN)

Session Classification: Training and Careers

Contribution ID: 86

Type: **not specified**

Lightning Talk 6 (Data Science @Università di Padova and INFN)

Tuesday, March 27, 2018 2:20 PM (10 minutes)

Presenter: ZANETTI, Marco (Universita e INFN, Padova (IT))

Session Classification: Training and Careers

Contribution ID: 87

Type: **not specified**

Lightning Talk 7 (Bertinoro School of Computing)

Tuesday, March 27, 2018 2:30 PM (10 minutes)

Presenter: GIACOMINI, Francesco (INFN CNAF)

Session Classification: Training and Careers

Contribution ID: **88**

Type: **not specified**

Lightning Talk 8 (Neutrino experiments @ FNAL)

Tuesday, March 27, 2018 2:40 PM (10 minutes)

Presenter: KUTSCHKE, Robert (Femilab)

Session Classification: Training and Careers

Contribution ID: **89**

Type: **not specified**

Lightning Talk 9 (VIRGO+LIGO)

Tuesday, March 27, 2018 2:50 PM (10 minutes)

Presenter: ASTONE, Pia (INFN - National Institute for Nuclear Physics)

Session Classification: Training and Careers

Contribution ID: **90**

Type: **not specified**

Lightning Talk 10 (Vision for Future Integrated Software Training)

Tuesday, March 27, 2018 3:00 PM (10 minutes)

Presenter: ELMER, Peter (Princeton University (US))

Session Classification: Training and Careers

Contribution ID: **91**

Type: **not specified**

Round Table - Discussion

Tuesday, March 27, 2018 3:10 PM (20 minutes)

Session Classification: Training and Careers

Contribution ID: 92

Type: **not specified**

Sponsor presentation: DELL

Monday, March 26, 2018 3:10 PM (15 minutes)

Presenter: HILGEMAN, Martin (Dell)

Session Classification: Technology Watch

Contribution ID: 93

Type: **not specified**

Sponsor presentation: RITTAL

Monday, March 26, 2018 3:25 PM (15 minutes)

Presenter: RYLANDS, Jason (Rittal)

Session Classification: Technology Watch

Contribution ID: 94

Type: **not specified**

GÉANT Data Transfer Node service

Monday, March 26, 2018 2:10 PM (10 minutes)

Design and users' recommendations

Presenter: Mr CAPONE, Vincenzo (GÉANT)

Session Classification: Technology Watch

Contribution ID: 95

Type: **not specified**

CERN Analysis Preservation Portal

Tuesday, March 27, 2018 1:50 PM (20 minutes)

Presenter: DALLMEIER-TIESEN, Sunje (CERN)

Session Classification: Data Preservation for HEP

Contribution ID: 96

Type: **not specified**

Achilles'heels in LTDP or how do we address risks

Tuesday, March 27, 2018 2:10 PM (20 minutes)

Presenter: GANIS, Gerardo (CERN)

Session Classification: Data Preservation for HEP

Contribution ID: 97

Type: **not specified**

Collaboration Across HEP and with Other Disciplines: An EIROForum Sub-Group

Tuesday, March 27, 2018 2:30 PM (20 minutes)

Two specific sub-topics:

- Offering LTDP Services to other HEP sites, e.g. “bit preservation” (and more?) for BaBar
- A nascent sub-group of the existing EIROForum IT Working Group

Presenter: SHIERS, Jamie (CERN)

Session Classification: Data Preservation for HEP

Contribution ID: **98**

Type: **not specified**

Archiving and Preservation "in the Cloud" - Outlook

Tuesday, March 27, 2018 2:50 PM (20 minutes)

Presenter: FERNANDES, João (CERN)

Session Classification: Data Preservation for HEP

Contribution ID: 99

Type: **not specified**

CWP Roadmap, Preparing Input to update of European Strategy for Particle Physics (and others elsewhere in the world)

Tuesday, March 27, 2018 3:10 PM (20 minutes)

Presenters: HILDRETH, Mike (Department of Physics-College of Science-University of Notre Da); HILDRETH, Mike (University of Notre Dame (US))

Session Classification: Data Preservation for HEP

Contribution ID: **100**

Type: **not specified**

IHEP Experiments and Software Development

Monday, March 26, 2018 10:40 AM (15 minutes)

Presenter: ZHANG, Xiaomei (Chinese Academy of Sciences (CN))

Session Classification: Opening Plenary Session

Contribution ID: **101**

Type: **not specified**

Dynamo - Intelligent Data Management

Tuesday, March 27, 2018 9:25 AM (15 minutes)

Presenters: MAIER, Benedikt (KIT - Karlsruhe Institute of Technology (DE)); MAIER, Benedikt (K); MAIER, Benedikt (Massachusetts Inst. of Technology (US)); PAUS, Christoph (Massachusetts Inst. of Technology (US))

Session Classification: Common Data Management and Data Lakes

Contribution ID: **102**

Type: **not specified**

Performance metrics and measurements in the Data Lake model

Presenters: MCCANCE, Gavin (CERN); SCHOVANCOVA, Jaroslava (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: **103**

Type: **not specified**

caching technologies: Xcache

Wednesday, March 28, 2018 5:30 PM (20 minutes)

Presenter: YANG, Wei (SLAC National Accelerator Laboratory (US))

Session Classification: Common Data Management and Data Lakes

Contribution ID: **104**

Type: **not specified**

XRoot and HTTP Third Party Copy

Wednesday, March 28, 2018 5:10 PM (20 minutes)

Presenter: HANUSHEVSKY, Andrew Bohdan (SLAC National Accelerator Laboratory (US))

Session Classification: Common Data Management and Data Lakes

Contribution ID: **105**

Type: **not specified**

wrap up

Tuesday, March 27, 2018 10:25 AM (5 minutes)

Session Classification: Common Data Management and Data Lakes

Contribution ID: **106**

Type: **not specified**

Project Discussions: Packaging

Wednesday, March 28, 2018 11:00 AM (30 minutes)

- Packaging requirements: what are the contentious points and how do we go forward?
- How do we scale to multiple project which have completely different timescales and requirements in terms of software stacks?

Presenter: STEWART, Graeme (CERN)

Session Classification: Software Development

Contribution ID: **107**

Type: **not specified**

Project Incubation

Wednesday, March 28, 2018 12:00 PM (15 minutes)

- Does the Incubator model of Apache make sense for HSF?
- As a project leaders what would make me move to HSF?
- As a HSF reviewers what are the minimum requirement for incubating a project?

Presenter: EULISSE, Giulio (CERN)

Session Classification: Software Development

Contribution ID: **108**

Type: **not specified**

Becoming "Mainstream"

Wednesday, March 28, 2018 12:15 PM (15 minutes)

- What are the OpenSource conferences / workshops we should try to have a more "active" presence?
- How can we get support from experiments, projects, home institutions to have people attend OpenSource events and be part of the OpenSource community?

Presenter: RODRIGUES, Eduardo (University of Cincinnati (US))

Session Classification: Software Development

Contribution ID: **109**

Type: **not specified**

Project Discussions: Profilers

Wednesday, March 28, 2018 11:30 AM (15 minutes)

- What are the available/used tools?
- What are their shortcomings?
- Possible solutions to these shortcomings

Presenter: COUTURIER, Ben (CERN)

Session Classification: Software Development

Contribution ID: 111

Type: **not specified**

Project Discussions: Static Analyzers

Wednesday, March 28, 2018 11:45 AM (15 minutes)

- What are the available/used tools?
- What are their shortcomings?
- Possible solutions to these shortcomings

Presenter: WENZEL, Sandro Christian (CERN)

Session Classification: Software Development

Contribution ID: **112**

Type: **not specified**

Geant4 R&D programme

Wednesday, March 28, 2018 2:30 PM (20 minutes)

Presenter: VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Simulation

Contribution ID: **113**

Type: **not specified**

ALICE - Preparation for Run3

Wednesday, March 28, 2018 1:50 PM (20 minutes)

Presenter: WENZEL, Sandro Christian (CERN)

Session Classification: Simulation

Contribution ID: 114

Type: **not specified**

LHCb - Preparation for Run3

Wednesday, March 28, 2018 1:30 PM (20 minutes)

Presenter: CORTI, Gloria (CERN)

Session Classification: Simulation

Contribution ID: 115

Type: **not specified**

Reconstruction challenges for HL-LHC

Monday, March 26, 2018 5:15 PM (20 minutes)

Presenter: INNOCENTE, Vincenzo (CERN)

Session Classification: HEP Use Cases

Contribution ID: 116

Type: **not specified**

Simulation and event reconstruction challenges for DUNE

Monday, March 26, 2018 4:50 PM (20 minutes)

Presenter: SNIDER, Erica (Fermilab)

Session Classification: HEP Use Cases

Contribution ID: **117**

Type: **not specified**

Parallelized tracking algorithms

Wednesday, March 28, 2018 10:00 AM (20 minutes)

Presenter: KORTELAINEN, Matti (Fermi National Accelerator Lab. (US))

Session Classification: Programming for Concurrency and Co-Processors

Contribution ID: **118**

Type: **not specified**

Variance reduction techniques in HEP for Geant4

Wednesday, March 28, 2018 4:50 PM (20 minutes)

Presenter: VERDERI, Marc (Centre National de la Recherche Scientifique (FR))

Session Classification: Simulation

Contribution ID: **119**

Type: **not specified**

VR-based event visualization in Belle II

Wednesday, March 28, 2018 12:00 PM (15 minutes)

Development and deployment of a new virtual-reality educational tool for physics students (and for public outreach) in which the user experiences and interacts with the animated timeline of GEANT4-generated electron-positron collision events in the Belle II apparatus at the KEK laboratory in Japan. Lessons learned during the project and future plans.

Presenter: PIILONEN, Leo (Virginia Tech)

Session Classification: Visualisation

Contribution ID: 120

Type: **not specified**

Distributed Storage and Data Lakes: The XDC Project

Wednesday, March 28, 2018 4:40 PM (5 minutes)

Presenter: KEEBLE, Oliver (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: **121**

Type: **not specified**

Discussion

Wednesday, March 28, 2018 10:20 AM (10 minutes)

Session Classification: Programming for Concurrency and Co-Processors

Contribution ID: 122

Type: **not specified**

Discussion on Frameworks Section of CWP

Wednesday, March 28, 2018 5:00 PM (30 minutes)

Presenter: SEXTON-KENNEDY, Elizabeth (Fermi National Accelerator Lab. (US))

Session Classification: Frameworks Technical Session

Contribution ID: 123

Type: **not specified**

Challenges for LHCb trigger

Monday, March 26, 2018 4:25 PM (20 minutes)

Presenter: BOZZI, Concezio (CERN and INFN Ferrara)

Session Classification: HEP Use Cases

Contribution ID: **124**

Type: **not specified**

Introduction

Monday, March 26, 2018 4:10 PM (10 minutes)

Session Classification: HEP Use Cases

Contribution ID: 125

Type: **not specified**

SKA contribution

Thursday, March 29, 2018 9:00 AM (30 minutes)

Presenter: SCAIFE, Anna (Manchester University)

Session Classification: Closing Plenary Session

Contribution ID: 126

Type: **not specified**

Summary of Common Data Management and Data Lakes

Thursday, March 29, 2018 9:30 AM (10 minutes)

Presenter: CAMPANA, Simone (CERN)

Session Classification: Closing Plenary Session

Contribution ID: 127

Type: **not specified**

Summary of Frameworks and Infrastructure

Thursday, March 29, 2018 9:40 AM (10 minutes)

Presenter: CLEMENCIC, Marco (CERN)

Session Classification: Closing Plenary Session

Contribution ID: 128

Type: **not specified**

Summary of Programming for Concurrency and Co-Processors

Thursday, March 29, 2018 9:50 AM (10 minutes)

Presenter: PIVARSKI, Jim (Princeton University)

Session Classification: Closing Plenary Session

Contribution ID: **129**

Type: **not specified**

Summary of Simulation

Thursday, March 29, 2018 10:00 AM (10 minutes)

Presenter: ELVIRA, Victor Daniel (Fermi National Accelerator Lab. (US))

Session Classification: Closing Plenary Session

Contribution ID: **130**

Type: **not specified**

Summary of Analysis Facilities and Use Cases

Thursday, March 29, 2018 10:10 AM (10 minutes)

Presenter: RODRIGUES, Eduardo (University of Cincinnati (US))

Session Classification: Closing Plenary Session

Contribution ID: 131

Type: **not specified**

Summary of Software Development

Thursday, March 29, 2018 10:20 AM (10 minutes)

Presenter: RITTER, Martin (LMU / Cluster Universe)

Session Classification: Closing Plenary Session

Contribution ID: 132

Type: **not specified**

Summary of Visualization

Thursday, March 29, 2018 11:00 AM (10 minutes)

Presenter: BIANCHI, Riccardo Maria (University of Pittsburgh (US))

Session Classification: Closing Plenary Session

Contribution ID: 133

Type: **not specified**

Summary of Workload Management

Thursday, March 29, 2018 11:10 AM (10 minutes)

Presenter: WENAUS, Torre (Brookhaven National Laboratory (US))

Session Classification: Closing Plenary Session

Contribution ID: 134

Type: **not specified**

Summary of Security

Thursday, March 29, 2018 11:20 AM (10 minutes)

Presenter: CROOKS, David (University of Glasgow (GB))

Session Classification: Closing Plenary Session

Contribution ID: 135

Type: **not specified**

Summary of Performance and Cost Modeling

Thursday, March 29, 2018 11:30 AM (10 minutes)

Presenter: SCHULZ, Markus (CERN)

Session Classification: Closing Plenary Session

Contribution ID: 136

Type: **not specified**

Summary of Data Preservation for HEP

Thursday, March 29, 2018 11:40 AM (10 minutes)

Presenters: Dr BECKER, Bruce (EGI Foundation); BECKER, Bruce (DAPNIA)

Session Classification: Closing Plenary Session

Contribution ID: 137

Type: **not specified**

Summary of Training and Careers

Thursday, March 29, 2018 11:50 AM (10 minutes)

Presenter: MALIK, Sudhir (University of Puerto Rico (PR))

Session Classification: Closing Plenary Session

Contribution ID: 138

Type: **not specified**

Conclusions and way forward

Thursday, March 29, 2018 12:00 PM (30 minutes)

Presenters: STEWART, Graeme (CERN); BIRD, Ian (CERN)

Session Classification: Closing Plenary Session

Contribution ID: 139

Type: **not specified**

Roadmap towards WM standardization for HL-LHC: Dirac perspective

Tuesday, March 27, 2018 2:50 PM (20 minutes)

Presenter: STAGNI, Federico (CERN)

Session Classification: Workload Management

Contribution ID: 140

Type: **not specified**

Challenges and evolution in event generators

Monday, March 26, 2018 5:40 PM (20 minutes)

Presenter: CHILDERS, Taylor (Argonne National Laboratory (US))

Session Classification: HEP Use Cases

Contribution ID: 141

Type: **not specified**

Roadmap towards WM standardization for HL-LHC: OSG perspective

Tuesday, March 27, 2018 3:10 PM (20 minutes)

Presenter: BOCKELMAN, Brian Paul (University of Nebraska Lincoln (US))

Session Classification: Workload Management

Contribution ID: 142

Type: **not specified**

Lightning Talk 3 (The CERN School of Computing)

Tuesday, March 27, 2018 1:50 PM (10 minutes)

Presenter: LOPIENSKI, Sebastian (CERN)

Session Classification: Training and Careers

Contribution ID: 143

Type: **not specified**

Open discussion: "Can we build common Viz Tools?" - Next steps

Wednesday, March 28, 2018 12:15 PM (15 minutes)

Open discussion on ideas for next steps towards possible joint projects and collaborations between HEP experiments.

Preparation for the Phase-2 of the CWP process: "After the CWP".

Presenters: BIANCHI, Riccardo Maria (University of Pittsburgh (US)); MC CAULEY, Thomas (University of Notre Dame (US))

Session Classification: Visualisation

Contribution ID: **144**

Type: **not specified**

The ESCAPE project

Session Classification: Common Data Management and Data Lakes

Contribution ID: 145

Type: **not specified**

The ESCAPE project

Wednesday, March 28, 2018 4:45 PM (5 minutes)

Presenter: BIRD, Ian (CERN)

Session Classification: Common Data Management and Data Lakes

Contribution ID: 146

Type: **not specified**

Open Discussion

Wednesday, March 28, 2018 5:30 PM (30 minutes)

Session Classification: Frameworks Technical Session