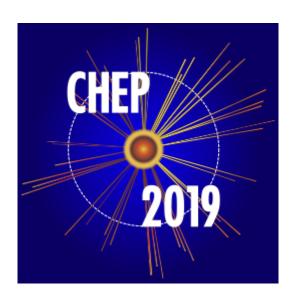**Session Program**

4-8 Nov 2019

24th International Conference on Computing in High Energy & Nuclear Physics

Track 7 – Facilities, Clouds and Containers

Adelaide Convention Centre
Adelaide, Australia

Monday 4 November

11:00

Track 7 – Facilities, Clouds and Containers: Monitoring and benchmarking

Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Oksana Shadura

11:00–11:15

Machine Learning-based Anomaly Detection of Ganglia Monitoring data in HEP Data Center

Speakers

Ms Juan Chen, juan chen

11:15–11:30

Anomaly detection using Unsupervised Machine Learning for Grid computing site operation

Speaker

Tomoe Kishimoto

11:30–11:45

Using HEP experiment workflows for the benchmarking and accounting of computing resources

Speaker

Andrea Valassi

11:45–12:00   WLCG Networks: Update on Monitoring and Analytics

Speaker

Pedro Andrade

12:00–12:15   WLCG Dashboards with Unified Monitoring

Speaker

Pedro Andrade

12:15–12:30   Large Elasticsearch cluster management

Speaker

Pablo Saiz

12:30

14:00

Track 7 – Facilities, Clouds and Containers: Cloud computing

Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Christoph Wissing

14:00–14:15   The DODAS experience on EGI Federated Cloud

Speaker

Daniele Spiga

14:15–14:30   CloudScheduler V2: Distributed Cloud Computing in the 21st century

Speaker

Randall Sobie

14:30–14:45

Increasing interoperability for research clouds: CS3APIs for connecting sync&share storage, applications and science environments

1

Speaker

Hugo Gonzalez Labrador

14:45–15:00

Pre-Commercial Procurement: R&D as a Service for the European Open Science Cloud

Speaker

Marion Devouassoux

15:00–15:15

Dynamic integration of distributed, Cloud-based HPC and HTC resources using JSON Web Tokens and the INDIGO IAM Service

Speaker

Stefano Dal Pra

15:15–15:30 **Characterizing network paths in and out of the Clouds**

Speaker

Igor Sfiligoi

15:30

Tuesday 5 November

11:00

Track 7 – Facilities, Clouds and Containers: Trends and new Approaches
Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Oksana Shadura

11:00–11:15
Real-time HEP analysis with funcX, a high-performance platform for function as a service

Speaker
Dr Anna Elizabeth Woodard

11:15–11:30   Trends in computing technologies and markets

Speaker
Shigeki Misawa

11:30–11:45   Integrating Interactive Jupyter Notebooks at the SDCC

Speaker
Ofer Rind

11:45–12:00   The SIMPLE Framework for deploying containerized grid services

Speaker
Julia Andreeva

12:00–12:15   Towards a NoOps Model for WLCG

Speaker
Robert William Gardner Jr

12:15–12:30
The NOTED software tool-set enables improved exploitation of WAN bandwidth for Rucio data transfers via FTS

Speaker
Tony Cass

12:30

14:00

Track 7 – Facilities, Clouds and Containers: Infrastructure
Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Sang Un Ahn

14:00–14:15
WLCG Web Proxy Auto Discovery for Dynamically Created Web Proxies

Speaker
Oliver Gutsche

14:15–14:30   Designing a new infrastructure for ATLAS Online Web Services

Speaker
Diana Scannicchio

14:30–14:45   Construction of a New Data Center at BNL

Speaker
Shigeki Misawa

14:45–15:00 **Preparing CERN Tier-0 data centres for LHC Run3**

Speaker

Olof Barring

15:00–15:15

Computing Activities at the Spanish Tier-1 and Tier-2s for the ATLAS experiment towards the LHC Run3 and High Luminosity (HL-LHC) periods

Speaker

Santiago Gonzalez De La Hoz

15:15–15:30

Beyond HEP: Photon and accelerator science computing infrastructure at DESY

Speaker

Thomas Hartmann

15:30

16:30

Track 7 – Facilities, Clouds and Containers: Containers

Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Sang Un Ahn

16:30–16:45 **Using Kubernetes as an ATLAS computing site**

Speaker

Fernando Harald Barreiro Megino

16:45–17:00 **Deployment of containers on the diverse ATLAS infrastructure**

Speaker

Alessandra Forti

17:00–17:15

Science Box: Converging to Kubernetes containers in production for on-premise and hybrid clouds for CERNBox, SWAN, and EOS

Speaker

Enrico Bocchi

17:15–17:30 **Managing the CERN Batch System with Kubernetes**

Speaker

Luis Fernandez Alvarez

17:30–17:45

Abstracting container technologies and transfer mechanisms in the Scalable CyberInfrastructure for Artificial Intelligence and Likelihood Free Inference (SCAILFIN) project

Speaker

Kenyi Paolo Hurtado Anampa

17:45–18:00

Running ALICE Grid Jobs in Containers - A new approach to job execution for the next generation ALICE Grid framework

Speaker

Maksim Melnik Storetvedt

18:00

Thursday 7 November

11:00

Track 7 – Facilities, Clouds and Containers: Non-LHC experiments
Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Christoph Wissing

11:00–11:15 Evolution of the LHAASO Distributed Computing System based Cloud

Speaker
Dr Qiulan Huang

11:15–11:30 VIRGO and Gravitational Waves computing in Europe

Speaker
Dr Stefano Bagnasco

11:30–11:45 online computing for new generation photon science experiments

Speaker
Mr Martin Gasthuber

11:45–12:00
High-availability on-site deployment to heterogeneous architectures for Project 8 and ADMX

Speaker
Benjamin LaRoque

12:00–12:15 IceCube Real-time Processing in AWS

Speakers
Benedikt Riedel, Benedikt Riedel

12:15–12:30 Designing a Federated Regional Centre for SKA Computing

Speaker
Dr Richard Hughes-Jones

12:30

14:00

Track 7 – Facilities, Clouds and Containers: Network technologies
Session | **Location:** Adelaide Convention Centre, Riverbank R4 | **Conveners:** Oksana Shadura, Sang Un Ahn

14:00–14:15 Readying CERN for connected device era

Speaker
Rodrigo Sierra

14:15–14:30 Unroutable LHCONE traffic

Speaker
Mr Bruno Hoeft

14:30–14:45 IPv6-only networking on WLCG

Speaker
David Kelsey

14:45–15:00 LHCb Online migration to ISC Kea - the modern DHCP server.

Speaker

Hristo Umaru Mohamed

15:00–15:15 **Network Capabilities for the HL-LHC Era**

Speaker

Shawn Mc Kee

15:15–15:30 **Network in Belle II**

Speaker

Silvio Pardi

15:30

14:00

Track 7 – Facilities, Clouds and Containers: Opportunistic resources
Session | **Location:** Adelaide Convention Centre, Riverbank R7 | **Convener:** Christoph Wissing

14:00–14:15 **Lightweight dynamic integration of opportunistic resources**

Speaker

Max Fischer

14:15–14:30

External Resources: Clouds and HPCs for the expansion of the ATLAS production system at the Tokyo regional analysis center

Speaker

Michiru Kaneda

14:30–14:45

Effective Dynamic Integration and Utilization of Heterogenous Compute Resources

Speaker

Manuel Giffels

14:45–15:00 **Offsite Data Processing for the GlueX Experiment**

Speaker

David Lawrence

15:00–15:15

Running HTC and HPC applications opportunistically across private, academic and public clouds

Speaker

Dr Andrew Lahiff

15:15–15:30 **ATLAS Sim@P1 upgrades during long shutdown two**

Speaker

Frank Berghaus

15:30