## HEP Software Foundation Workshop

## **Report of Contributions**

Contribution ID: 0 Type: not specified

#### **HSF Status**

Monday 2 May 2016 14:10 (25 minutes)

Achievements since SLAC workshop

#### **Summary**

**Presenter:** MATO VILA, Pere (CERN)

Session Classification: HSF Status

Contribution ID: 1 Type: not specified

## **Feedback from the Experiments**

Contribution ID: 2 Type: not specified

# **SW Packaging: Spack Introduction and Coding Sprint**

Spack has received an extremely enthusiastic reception in the HSF packaging group that has looked at 8 or so packaging systems over close to a year of meetings and studies. Spack accordingly could be a useful target for educating the community and bootstrapping tools around it in a focused session and coding sprint.

**Presenters:** HEGNER, Benedikt (CERN); SEXTON-KENNEDY, Elizabeth (Fermi National Accelerator Lab. (US))

Contribution ID: 3 Type: **not specified** 

# **Knowledge Base and Training: Bootstrapping Information Gathering**

After an intro/tutorial, in real time gather knowledge base and training content and populate hepsoftware.org knowledge base, and WikiToLearn training/tutorial site.

**Presenters:** MENASCE, Dario (Universita & INFN, Milano-Bicocca (IT)); WENAUS, Torre (Brookhaven National Laboratory (US))

Contribution ID: 4 Type: **not specified** 

## **Machine Learning**

**Presenter:** ROUSSEAU, David (LAL-Orsay, FR)

Contribution ID: 5 Type: **not specified** 

## **Concurrency and New Architectures**

Contribution ID: 6 Type: **not specified** 

## **Project Incubator**

Discussion with projects on next step for the HSF project incubator

Licensing

Contribution ID: 7 Type: **not specified** 

## Licensing

Discussion around licensing after the release of the Technical Note first version: uncovered use cases, projects with concrete issues...

New Initiatives

Contribution ID: 8 Type: not specified

#### **New Initiatives**

Wednesday 4 May 2016 14:00 (1 hour)

Follow-up on workshop discussions/plans, community roadmap, SW&C journal...

#### **Summary**

**Session Classification:** HSF Next Steps

HEP Software F  $\,\cdots\,$  / Report of Contributions

Wrap-Up

Contribution ID: 9 Type: not specified

#### Wrap-Up

Wednesday 4 May 2016 16:00 (30 minutes)

#### **Summary**

Meeting at CHEP?

**Session Classification:** HSF Next Steps

Contribution ID: 10 Type: not specified

## Mini-Workshop/Hackaton Summaries

HEP Software F  $\,\cdots\,$  / Report of Contributions

Test

Contribution ID: 11 Type: not specified

**Test** 

Contribution ID: 12 Type: not specified

#### **Bioconductor: Open software for Bioinformatics**

Monday 2 May 2016 16:45 (20 minutes)

Bioconductor: Open software for  $\cdots$ 

**Presenter:** HUBER, Wolfgang (EMBL)

Session Classification: Learning from Other Communities

Contribution ID: 13 Type: not specified

#### **Future Conditions DB**

Monday 2 May 2016 15:00 (15 minutes)

Presenter: FORMICA, Andrea (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR))

Session Classification: News from Projects

Contribution ID: 14 Type: not specified

#### **AIDA2020 WP3**

Monday 2 May 2016 15:15 (15 minutes)

**Presenter:** GAEDE, Frank-Dieter (Deutsches Elektronen-Synchrotron (DE))

Session Classification: News from Projects

Contribution ID: 16 Type: not specified

#### Introduction

Tuesday 3 May 2016 09:00 (5 minutes)

Presenters: ROUSSEAU, David (LAL-Orsay, FR); Dr VLIMANT, Jean-Roch (California Institute of

Technology (US))

Session Classification: Machine Learning

Contribution ID: 17 Type: not specified

#### Report from openLab ML workshop

Tuesday 3 May 2016 09:35 (20 minutes)

Presenter: GIRONE, Maria (CERN)

Session Classification: Machine Learning

Contribution ID: 18 Type: not specified

## TMVA, Root-R, Root SciKit-learn

Tuesday 3 May 2016 10:00 (20 minutes)

Presenter: MONETA, Lorenzo (CERN)

Session Classification: Machine Learning

Contribution ID: 19 Type: not specified

#### **Experience with Theano/Keras**

Tuesday 3 May 2016 11:10 (20 minutes)

Presenter: PAGANINI, Michela (Yale University (US))

Session Classification: Machine Learning

Contribution ID: 20 Type: not specified

#### Everware and yandex' rep

Tuesday 3 May 2016 10:25 (20 minutes)

**Presenter:** USTYUZHANIN, Andrey (Yandex School of Data Analysis (RU))

Session Classification: Machine Learning

Contribution ID: 21 Type: not specified

## Codalab, a challenge platform on MS Azure

**Presenter:** GUYON, Isabelle

Contribution ID: 22 Type: not specified

# Challenges and beyond, RAMP (ML oriented hackathon platform)

**Presenter:** KÉGL, Balázs (Linear Accelerator Laboratory)

Open Data

Contribution ID: 23 Type: not specified

#### **Open Data**

Tuesday 3 May 2016 11:35 (20 minutes)

Presenter: LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Session Classification: Machine Learning

Contribution ID: 24 Type: not specified

#### **Open Sim: ACTS, A Common Tracking Software**

Tuesday 3 May 2016 12:00 (20 minutes)

Open Sim : ACTS, A Common Tr  $\, \cdots \,$ 

Presenter: SALZBURGER, Andreas (CERN)

Session Classification: Machine Learning

Contribution ID: 25 Type: not specified

#### **Interexperiment Machine Learning group and HSF**

Tuesday 3 May 2016 12:25 (20 minutes)

#### **Summary**

Presenters: FLORIS, Michele (CERN); Dr GLEYZER, Sergei (University of Florida (US)); SCHRAMM,

Steven Randolph (Universite de Geneve (CH)); HEAD, Tim (The University of Manchester)

Session Classification: Machine Learning

Contribution ID: 26 Type: not specified

#### **Netherlands eScience Center**

Monday 2 May 2016 17:05 (20 minutes)

#### **Summary**

Presenter: REMENSKA, Daniela (NIKHEF (NL))

Session Classification: Learning from Other Communities

Contribution ID: 27 Type: not specified

#### **Community White Paper: a roadmap for the HSF?**

Monday 2 May 2016 14:35 (25 minutes)

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

**Session Classification:** HSF Status

DIANA/HEP

Contribution ID: 28 Type: not specified

#### **DIANA/HEP**

Monday 2 May 2016 15:30 (15 minutes)

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

**Session Classification:** News from Projects

Contribution ID: 29 Type: not specified

#### Depsy

Monday 2 May 2016 17:25 (20 minutes)

#### **Summary**

**Primary author:** PRIEM, Jason (Impactstory)

**Presenter:** PRIEM, Jason (Impactstory)

**Session Classification:** Learning from Other Communities

Contribution ID: 30 Type: not specified

## **Knowledge Base**

Monday 2 May 2016 15:45 (15 minutes)

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

Session Classification: News from Projects

Contribution ID: 31 Type: not specified

#### WikiToLearn

Monday 2 May 2016 16:00 (15 minutes)

Presenter: IACONELLI, Riccardo Giulio (Universita & INFN, Milano-Bicocca (IT))

Session Classification: News from Projects

Contribution ID: 32 Type: not specified

#### **Community Roadmap**

Wednesday 4 May 2016 15:00 (1 hour)

Discuss possibility and contents of a community roadmap reflecting our computing challenges and that could be used as a reference by projects and in discussion with Funding Agencies

**Session Classification:** HSF Next Steps

Contribution ID: 33 Type: not specified

## Machine Learning Hackathon (RAMP) on Anomaly Detection

#### **Summary**

Suppose you have two datasets which are supposed to be identical. For example MC production v1, MC production v2; data of yesterday, data of today. How to detect differences? This is done typically by comparing rates, or manually defined histograms. How to do this in an automatized, Machine Learning way? The objective will be to detect differences between two datasets, identical except for introduced manipulations. The RAMP platform allows participants to collaborate to achieve this goal.

**Presenters:** KÉGL, Balázs (Linear Accelerator Laboratory); ROUSSEAU, David (LAL-Orsay, FR); Dr VLIMANT, Jean-Roch (California Institute of Technology (US))

Contribution ID: 34 Type: not specified

# **Deep Learning Implications for HEP Software & Computing**

Tuesday 3 May 2016 09:05 (25 minutes)

Presenter: FARBIN, Amir (University of Texas at Arlington (US))

Session Classification: Machine Learning

Contribution ID: 35 Type: not specified

## Challenges and beyond, RAMP (ML oriented hackathon platform)

Tuesday 3 May 2016 14:00 (20 minutes)

Presenter: KÉGL, Balázs (Linear Accelerator Laboratory)

Session Classification: RAMP

Contribution ID: 36 Type: not specified

# Codalab, a challenge platform on MS Azure

Tuesday 3 May 2016 14:25 (10 minutes)

**Presenter:** GUYON, Isabelle

Session Classification: RAMP

Contribution ID: 37 Type: not specified

# **Anomaly Detection: setting the stage**

Tuesday 3 May 2016 14:40 (15 minutes)

Anomaly Detection : setting the s  $\,\cdots$ 

**Summary** 

Session Classification: RAMP

HEP Software F  $\,\cdots\,$  / Report of Contributions

Contribution ID: 38 Type: not specified

# **Anomaly Detection: hands on**

Tuesday 3 May 2016 15:00 (2h 30m)

Anomaly Detection : hands on

Session Classification: RAMP

Contribution ID: 39 Type: not specified

## Panel discussion

Wednesday 4 May 2016 11:15 (1h 15m)

Mail goal is to organize ourselves around activity areas with proto-working groups in these activity areas, with an early objective for these working groups to organize sessions at a follow-on dedicated (and more hands-on than this session can be) software concurrency/performance workshop in a few months.

#### **Summary**

**Session Classification:** Software Performance

**ATLAS** 

Contribution ID: 40 Type: not specified

## **ATLAS**

Wednesday 4 May 2016 09:15 (15 minutes)

## **Summary**

**Presenter:** STEWART, Graeme (University of Glasgow (GB))

Session Classification: Software Performance

ALICE

Contribution ID: 41 Type: not specified

## **ALICE**

Wednesday 4 May 2016 09:00 (15 minutes)

## **Summary**

Presenter: ROHR, David (Johann-Wolfgang-Goethe Univ. (DE))

Session Classification: Software Performance

Contribution ID: 42 Type: not specified

## **CMS**

Wednesday 4 May 2016 09:30 (15 minutes)

## **Summary**

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

Session Classification: Software Performance

LHCb

Contribution ID: 43 Type: not specified

## **LHCb**

**Session Classification:** Software Performance

Root

Contribution ID: 44 Type: **not specified** 

## **Root**

Wednesday 4 May 2016 10:00 (15 minutes)

## **Summary**

**Presenter:** MATO VILA, Pere (CERN)

Session Classification: Software Performance

Astro

Contribution ID: 45 Type: not specified

## **Astro**

Wednesday 4 May 2016 09:45 (15 minutes)

## **Summary**

**Presenter:** Mr OLIVIER, Iffrig (CEA/Irfu/AIM)

Session Classification: Software Performance

Geant

Contribution ID: 46 Type: not specified

## Geant

Wednesday 4 May 2016 10:15 (15 minutes)

## **Summary**

**Presenter:** APOSTOLAKIS, John (CERN)

Session Classification: Software Performance

Art/LArSoft

Contribution ID: 47 Type: **not specified** 

## Art/LArSoft

Wednesday 4 May 2016 10:30 (15 minutes)

#### **Summary**

Presenters: KOWALKOWSKI, Jim (Fermilab); PATERNO, Marc (Fermi National Accelerator Labo-

ratory (FNAL)); PATERNO, Marc (Fermilab)

Session Classification: Software Performance

Contribution ID: 48 Type: not specified

## Introduction

Tuesday 3 May 2016 14:00 (20 minutes)

**Presenter:** Dr GARTUNG, Patrick (Fermilab (US))

Session Classification: Packaging

Contribution ID: 49 Type: not specified

# Introduction

Monday 2 May 2016 14:00 (10 minutes)

Contribution ID: 50 Type: not specified

# **HSF Project Discussion Session**

Monday 2 May 2016 10:30 (20 minutes)

**Presenter:** HEGNER, Benedikt (CERN)

**Session Classification:** Project Support in HSF