

HEP Software Foundation Workshop

Monday 02 May 2016 - Wednesday 04 May 2016

LAL

Book of Abstracts

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HSF Status

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Achievements since SLAC workshop

Summary:

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Feedback from the Experiments

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SW Packaging: Spack Introduction and Coding Sprint

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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.

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Knowledge Base and Training: Bootstrapping Information Gathering

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

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Machine Learning

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Concurrency and New Architectures

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Project Incubator

Discussion with projects on next step for the HSF project incubator

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Licensing

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

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New Initiatives

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

Summary:

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Wrap-Up

Summary:

Meeting at CHEP?

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Mini-Workshop/Hackaton Summaries

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Test

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Bioconductor: Open software for Bioinformatics

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Future Conditions DB

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AIDA2020 WP3

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Introduction

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Report from openLab ML workshop

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TMVA, Root-R, Root SciKit-learn

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Experience with Theano/Keras

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Everware and yandex' rep

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Codalab, a challenge platform on MS Azure

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Challenges and beyond, RAMP (ML oriented hackathon platform)

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Open Data

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Open Sim : ACTS, A Common Tracking Software

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Interexperiment Machine Learning group and HSF

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Netherlands eScience Center

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Community White Paper: a roadmap for the HSF?

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DIANA/HEP

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Depsy

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Knowledge Base

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WikiToLearn

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Community Roadmap

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

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Machine Learning Hackathon (RAMP) on Anomaly Detection

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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.

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Deep Learning Implications for HEP Software & Computing

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RAMP / 35

Challenges and beyond, RAMP (ML oriented hackathon platform)

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Codalab, a challenge platform on MS Azure

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Anomaly Detection : setting the stage

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Anomaly Detection : hands on

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Panel discussion

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:

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ATLAS

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ALICE

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CMS

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LHCb

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Root

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Astro

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Geant

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Art/LArSoft

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Introduction

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HSF Project Discussion Session

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