HEP analysis ecosystem workshop



Report of Contributions

Contribution ID: 1 Type: not specified

Results of analysis tools in HEP survey

Tuesday, 23 May 2017 16:45 (15 minutes)

Session Classification: Concrete technologies

Contribution ID: 2 Type: not specified

Survey of data formats, conversion tools

Tuesday, 23 May 2017 13:30 (15 minutes)

Presenter: PIVARSKI, Jim (Princeton University)

Session Classification: Concrete technologies

Contribution ID: 3 Type: not specified

Survey of languages for analysis

Tuesday, 23 May 2017 13:50 (15 minutes)

Presenter: Dr BINET, Sebastien (IN2P3/LPC)

Session Classification: Concrete technologies

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

Xrootd for analysis

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

Session Classification: Concrete technologies

Swan

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

Swan

Tuesday, 23 May 2017 14:10 (10 minutes)

Presenter: TEJEDOR SAAVEDRA, Enric (CERN)

Session Classification: Concrete technologies

Hydra

Contribution ID: 6 Type: not specified

Hydra

Tuesday, 23 May 2017 15:30 (10 minutes)

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

Session Classification: Concrete technologies

Femtocode

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

Femtocode

Tuesday, 23 May 2017 15:45 (10 minutes)

Presenter: PIVARSKI, Jim (Princeton University)

Session Classification: Concrete technologies

Contribution ID: 8 Type: not specified

IT analytics tool chains

Tuesday, 23 May 2017 16:00 (10 minutes)

Presenter: DUELLMANN, Dirk (CERN)

Session Classification: Concrete technologies

Contribution ID: 9 Type: not specified

Experience with analysis using Tensorflow and coprocessors

Tuesday, 23 May 2017 16:15 (10 minutes)

Presenter: POLUEKTOV, Anton (University of Warwick (GB))

Session Classification: Concrete technologies

Contribution ID: 10 Type: not specified

ROOT's Place and its Capabilities in the HEP Analysis Ecosystem

Monday, 22 May 2017 10:20 (40 minutes)

An overview of what ROOT provides support for with HEP and general physics data analyses. With an overview of the ongoing developments in/for ROOT 6.

Presenter: MATO VILA, Pere (CERN)

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 11 Type: not specified

Data Formats in HEP Analyses

Monday, 22 May 2017 11:10 (15 minutes)

An overview of how HEP (LHC) experiments use ROOT and non-ROOT I/O. And what current developments are happening to optimise this.

Presenter: BLOMER, Jakob (CERN)

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 12 Type: not specified

Data Analysis in ATLAS

Monday, 22 May 2017 11:30 (20 minutes)

An overview of how ATLAS performs physics analysis.

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

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 13 Type: not specified

Data Analysis in CMS

Monday, 22 May 2017 12:00 (20 minutes)

An overview of how CMS performs physics analysis.

Presenter: CERMINARA, Gianluca (CERN)

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 14 Type: not specified

Data Analysis in LHCb

Monday, 22 May 2017 14:00 (20 minutes)

An overview of how LHCb performs physics analysis.

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

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 15 Type: not specified

Data Analysis at the Intensity Frontier

Monday, 22 May 2017 13:30 (20 minutes)

An overview of how intensity frontier experiments analyse their data.

Presenter: CANAL, Philippe (Fermi National Accelerator Lab. (US))

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 16 Type: not specified

Data Analysis in Belle II

Monday, 22 May 2017 14:30 (20 minutes)

An overview of how Belle II performs physics analysis.

Presenter: RITTER, Martin

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 17 Type: not specified

Last Steps of the Analysis

Monday, 22 May 2017 16:00 (20 minutes)

An overview of the currently used statistical tools and techniques, how data is handled in the final stages of an analysis, and how data is shared between experiments.

Presenter: GILBERT, Andrew (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 18 Type: not specified

The Machine Learning Landscape

Monday, 22 May 2017 15:30 (20 minutes)

An overview of the ML tools used in HEP analyses today.

Presenter: SCHRAMM, Steven Randolph (Universite de Geneve (CH))

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 19 Type: not specified

Round table - Data Analysis

Monday, 22 May 2017 16:30 (30 minutes)

Session Classification: Today's analysis ecosystem landscape and toolset

Contribution ID: 20 Type: not specified

What hardware and computing facilities do we expect in 5-7 years for analysis?

Tuesday, 23 May 2017 09:00 (15 minutes)

Presenter: RADEMAKERS, Fons (CERN)

Session Classification: The analysis ecosystem vision

My vision

Contribution ID: 21 Type: not specified

My vision

Tuesday, 23 May 2017 09:40 (15 minutes)

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

 $\textbf{Session Classification:} \ \ \textbf{The analysis ecosystem vision}$

Contribution ID: 22 Type: not specified

Perspectives on HEP data analysis software, by an ex-high energy physicist turned (big) data scientist

Tuesday, 23 May 2017 09:20 (20 minutes)

Presenters: BAAK, Max (CERN); BAAK, Max (CERN)

Session Classification: The analysis ecosystem vision

My vision

Contribution ID: 23 Type: not specified

My vision

Tuesday, 23 May 2017 10:00 (20 minutes)

Presenter: WATTS, Gordon (University of Washington (US))

Session Classification: The analysis ecosystem vision

Contribution ID: 25 Type: not specified

ROOT vision (1)

Tuesday, 23 May 2017 11:20 (15 minutes)

Presenter: MATO VILA, Pere (CERN)

Session Classification: The analysis ecosystem vision

ROOT vision (2)

Contribution ID: 26 Type: not specified

ROOT vision (2)

Tuesday, 23 May 2017 11:40 (15 minutes)

Presenter: NAUMANN, Axel (CERN)

Session Classification: The analysis ecosystem vision

Discussion

Contribution ID: 27 Type: not specified

Discussion

Tuesday, 23 May 2017 12:00 (30 minutes)

Session Classification: The analysis ecosystem vision

Contribution ID: 28 Type: not specified

Workshop Introduction and Goals

Monday, 22 May 2017 10:00 (20 minutes)

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

My vision

Contribution ID: 29 Type: not specified

My vision

Tuesday, 23 May 2017 11:00 (15 minutes)

Presenters: RAVEN, Gerhard (Nikhef National institute for subatomic physics (NL)); RAVEN, Gerhard (Natuurkundig Laboratorium-Vrije Universiteit (VU)-Unknown)

Session Classification: The analysis ecosystem vision

Contribution ID: 30 Type: not specified

XENON1T

Tuesday, 23 May 2017 14:25 (10 minutes)

Presenters: Dr TUNNELL, Christopher (University of Chicago); TUNNELL, Christopher (Enrico

Fermi Institute-University of Chicago-Unknown)

Session Classification: Concrete technologies

iDark

Contribution ID: 31 Type: not specified

iDark

Tuesday, 23 May 2017 16:30 (10 minutes)

Presenter: CARON, Sascha (Nikhef National institute for subatomic physics (NL))

Session Classification: Concrete technologies