

HEPscore Workshop

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome and purpose of the workshop

Monday 19 September 2022 09:00 (15 minutes)

Presenters: GIORDANO, Domenico (CERN); SOBIE, Randy (University of Victoria (CA))

Session Classification: HEPscore Task Force results

Contribution ID: 2

Type: **not specified**

Overview of the Task Force activity

Monday 19 September 2022 09:15 (15 minutes)

a recap of

- when and how it started
- who was part of it
- what we have achieved (the workloads, the campaign)
- where we have reported already

Presenter: MEINHARD, Helge (CERN)

Session Classification: HEPscore Task Force results

Contribution ID: 3

Type: **not specified**

Analysis of the Measurement Campaign

Monday 19 September 2022 09:30 (30 minutes)

Presenters: SOBIE, Randall (University of Victoria (CA)); SOBIE, Randy (University of Victoria (CA))

Session Classification: HEPscore Task Force results

Contribution ID: 4

Type: **not specified**

HEPscore candidates

Monday 19 September 2022 10:10 (20 minutes)

Presenter: SULLIVAN, Tristan (University of Victoria (CA))

Session Classification: HEPscore Task Force results

Contribution ID: 5

Type: **not specified**

Profiling of HEP Workloads

Monday 19 September 2022 12:15 (30 minutes)

Presenter: INNOCENTE, Vincenzo (CERN)

Session Classification: HEP Workloads

Contribution ID: 6

Type: **not specified**

Feedback from the Experiments

- report the experience in building standalone containers
- suggestions
- plans for the experiments' software evolution

Session Classification: HEP Workloads

Contribution ID: 7

Type: **not specified**

Coffee break

Session Classification: HEP Workloads

Contribution ID: 9

Type: **not specified**

The experience of some data centres in running the suite

Session Classification: HEP Benchmark Suite

Contribution ID: **11**

Type: **not specified**

Measurements of Power Consumption (room for other contributions)

Tuesday 20 September 2022 14:40 (40 minutes)

Presenter: ROUND TABLE

Session Classification: Developments beyond x86 CPUs

Contribution ID: **12**

Type: **not specified**

Run HEPscore "light" on grid

Session Classification: Developments beyond x86 CPUs

Contribution ID: 13

Type: **not specified**

HEPscore in the accounting system: Operational Strategy

Tuesday 20 September 2022 09:05 (25 minutes)

- what is the deployment plan of a new benchmark?
- how sites should contribute?
- what is the possible time scale (months, years)
- how the pledges and procurement should then start to include HEPscore (in parallel to HS06 at first, to then gradually replace it)
- What are the validation procedures foreseen in these phases?
- how often a benchmark should/could be changed? every 4-5 years (at each LS?)

Presenters: ANDREEVA, Julia (CERN); LITMAATH, Maarten (CERN)

Session Classification: Strategy to deploy HEPscore

Contribution ID: 14

Type: **not specified**

Round table: HEPscore22 and adoption process

Tuesday 20 September 2022 09:55 (40 minutes)

On the basis of what has been presented in the workshop, gather the feedback of the participants about:

- the HEP workload mix that better satisfies the WLCG requirements (representativeness, runtime duration, size)
- the operational process for HEPscore adoption in the Accounting system (timescale, validation, frequency of future upgrades, ...)

Presenter: ROUND TABLE

Session Classification: Strategy to deploy HEPscore

Contribution ID: 15

Type: **not specified**

Alice workloads

Monday 19 September 2022 11:30 (15 minutes)

Presenter: WENZEL, Sandro Christian (CERN)

Session Classification: HEP Workloads

Contribution ID: **16**

Type: **not specified**

Atlas workloads

Monday 19 September 2022 11:15 (15 minutes)

Presenter: LAMPL, Walter (University of Arizona (US))

Session Classification: HEP Workloads

Contribution ID: 17

Type: **not specified**

CMS workloads

Monday 19 September 2022 11:45 (15 minutes)

Presenter: Dr BOCCALI, Tommaso (INFN Sezione di Pisa)

Session Classification: HEP Workloads

Contribution ID: **18**

Type: **not specified**

IGWN workloads

Monday 19 September 2022 14:15 (15 minutes)

Presenter: WILLIS, Joshua Lee

Session Classification: HEP Workloads

Contribution ID: **19**

Type: **not specified**

Juno workloads

Monday 19 September 2022 14:00 (15 minutes)

Presenter: YAN, Xiaofei (Chinese Academy of Sciences (CN))

Session Classification: HEP Workloads

Contribution ID: **20**

Type: **not specified**

LHCb workloads

Monday 19 September 2022 12:00 (15 minutes)

Presenter: VALASSI, Andrea (CERN)

Session Classification: HEP Workloads

Contribution ID: **21**

Type: **not specified**

The Suite and the Benchmark DB (demo)

Monday 19 September 2022 14:50 (20 minutes)

Presenter: MENENDEZ BERGE, Gonzalo (CERN)

Session Classification: HEP Benchmark Suite

Contribution ID: 22

Type: **not specified**

Madgraph on GPU

Tuesday 20 September 2022 11:30 (20 minutes)

Presenters: VALASSI, Andrea (CERN); ROISER, Stefan (CERN)

Session Classification: Developments beyond x86 CPUs

Contribution ID: 23

Type: **not specified**

Study of ML Particle Flow based GPU benchmarking

Tuesday 20 September 2022 11:50 (20 minutes)

Author: Mr CUBA, Eduard (University of Zurich (CH))

Co-author: SOUTHWICK, David (CERN)

Presenters: SOUTHWICK, David (CERN); Mr CUBA, Eduard (University of Zurich (CH)); WULFF, Eric (CERN)

Session Classification: Developments beyond x86 CPUs

Contribution ID: **24**

Type: **not specified**

CMS HLT-like

Tuesday 20 September 2022 12:10 (20 minutes)

Presenters: Dr SCIABÀ, Andrea (CERN); Dr BOCCALI, Tommaso (INFN Sezione di Pisa); BOCCALI, Tommaso (INFN Sezione di Pisa, Università e Scuola Normale Superiore, P)

Session Classification: Developments beyond x86 CPUs

Contribution ID: 25

Type: **not specified**

Experience running HEP workloads at HPC

Tuesday 20 September 2022 11:05 (25 minutes)

Presenter: SOUTHWICK, David (CERN)

Session Classification: Developments beyond x86 CPUs

Contribution ID: 26

Type: **not specified**

Study of power efficiency ARM vs x86

Tuesday 20 September 2022 14:00 (20 minutes)

Presenter: SIMILI, Emanuele (University of Glasgow (GB))

Session Classification: Developments beyond x86 CPUs

Contribution ID: 27

Type: **not specified**

Intro to the session

Tuesday 20 September 2022 11:00 (5 minutes)

Presenter: GIORDANO, Domenico (CERN)

Session Classification: Developments beyond x86 CPUs

Contribution ID: **28**

Type: **not specified**

Intro to the Workload session

Monday 19 September 2022 11:10 (5 minutes)

Presenter: GIORDANO, Domenico (CERN)

Session Classification: HEP Workloads

Contribution ID: 29

Type: **not specified**

Discussion

Monday 19 September 2022 10:30 (10 minutes)

Presenter: ROUND TABLE

Session Classification: HEPscore Task Force results

Contribution ID: **30**

Type: **not specified**

Intro to the HEP-Benchmark-Suite session

Monday 19 September 2022 14:45 (5 minutes)

Presenter: GIORDANO, Domenico (CERN)

Session Classification: HEP Benchmark Suite

Contribution ID: **31**

Type: **not specified**

Experience of running the Suite @ CERN

Monday 19 September 2022 15:10 (10 minutes)

Presenters: ATZORI, Luca (CERN); PAPAKYPRIANOU, Nikos (CERN)

Session Classification: HEP Benchmark Suite

Contribution ID: 32

Type: **not specified**

Experience of running the Suite @ IJCLAB

Monday 19 September 2022 16:30 (10 minutes)

Presenter: Dr VAMVAKOPOULOS, Emmanouil (Université Paris-Saclay (FR))

Session Classification: HEP Benchmark Suite

Contribution ID: 33

Type: **not specified**

Experience of running the Suite @ RAL

Monday 19 September 2022 15:20 (10 minutes)

Presenter: DEWHURST, Alastair (Science and Technology Facilities Council STFC (GB))

Session Classification: HEP Benchmark Suite

Contribution ID: 34

Type: **not specified**

Experience of running the Suite @ PIC

Monday 19 September 2022 16:20 (10 minutes)

Presenter: ACOSTA SILVA, Carles (PIC)

Session Classification: HEP Benchmark Suite

Contribution ID: 35

Type: **not specified**

HEPscore in the accounting system: Development Status

Tuesday 20 September 2022 09:30 (15 minutes)

- Description of the software changes, ETA, risks
- Implications /dependencies from other components that will require modifications (ARC and HTCondor CE, EGI portal, WAU, etc)

Presenter: COVENEY, Adrian (STFC UKRI)

Session Classification: Strategy to deploy HEPscore

Contribution ID: 36

Type: **not specified**

Welcome and intro to the 2nd day

Tuesday 20 September 2022 09:00 (5 minutes)

Presenters: GIORDANO, Domenico (CERN); SOBIE, Randall (University of Victoria (CA))

Session Classification: Strategy to deploy HEPscore

Contribution ID: 37

Type: **not specified**

Measurements of electrical power consumption for HEP workflows @ CERN

Tuesday 20 September 2022 14:20 (20 minutes)

Presenters: ATZORI, Luca (CERN); PAPAKYPRIANOU, Nikos (CERN); ROISER, Stefan (CERN)

Session Classification: Developments beyond x86 CPUs

Contribution ID: 38

Type: **not specified**

Experience of running the Suite @ IN2P3-CC

Monday 19 September 2022 16:10 (10 minutes)

Presenter: PUEL, Mattieu

Session Classification: HEP Benchmark Suite

Contribution ID: 39

Type: **not specified**

Considerations around a benchmark change

Tuesday 20 September 2022 09:45 (10 minutes)

Presenter: PANZER-STEINDEL, Bernd (CERN)

Session Classification: Strategy to deploy HEPscore

Contribution ID: 40

Type: **not specified**

HEPscore development update

Monday 19 September 2022 14:30 (15 minutes)

Presenter: HOLLOWELL, Christopher Henry (Brookhaven National Laboratory (US))

Session Classification: HEP Workloads

Contribution ID: 41

Type: **not specified**

Considerations around HS06 and geometric mean

Monday 19 September 2022 10:00 (10 minutes)

Presenter: GIORDANO, Domenico (CERN)

Session Classification: HEPscore Task Force results

Contribution ID: 42

Type: **not specified**

Experience of running the Suite @ Nikhef

Monday 19 September 2022 16:00 (10 minutes)

Presenter: Dr PICKFORD, Andrew (Nikhef)

Session Classification: HEP Benchmark Suite