

HSF Event Generator Tuning Workshop

Report of Contributions

Contribution ID: 1

Type: **not specified**

Professor

Wednesday 28 June 2023 15:00 (1 hour)

<https://gitlab.com/hepcedar/professor>, <https://arxiv.org/abs/0907.2973>

Presenter: BUCKLEY, Andy (University of Glasgow (GB))

Session Classification: Tuning Software Overview

Contribution ID: 2

Type: **not specified**

Apprentice

<https://github.com/HEPonHPC/apprentice>, <https://arxiv.org/abs/2103.05748>

Session Classification: Tuning Software Overview

Contribution ID: 3

Type: **not specified**

Autotunes

<https://gitlab.com/Autotunes>, <https://arxiv.org/abs/1908.10811>

Session Classification: Tuning Software Overview

Contribution ID: 4

Type: **not specified**

MCNNTUNES

<https://github.com/N3PDF/mcnntunes>, <https://arxiv.org/abs/2010.02213>

Session Classification: Tuning Software Overview

Contribution ID: 6

Type: **not specified**

Welcome

Tuesday 27 June 2023 15:00 (10 minutes)

Contribution ID: 7

Type: **not specified**

ATLAS

Tuesday 27 June 2023 16:25 (15 minutes)

Presenter: KAR, Deepak (University of the Witwatersrand (ZA))

Session Classification: Collaboration Experience

Contribution ID: 8

Type: **not specified**

CMS

Tuesday 27 June 2023 16:10 (15 minutes)

Presenter: SEN, Sercan (Istanbul Technical University (TR))

Session Classification: Collaboration Experience

Contribution ID: 9

Type: **not specified**

LHCb

Tuesday 27 June 2023 16:40 (10 minutes)

Presenter: Ms BASHIR, Saliha (AGH University of Science and Technology (PL))

Session Classification: Collaboration Experience

Contribution ID: **10**

Type: **not specified**

Generator Experience

Session Classification: Generator Overview

Contribution ID: **11**

Type: **not specified**

Sherpa

Session Classification: Generator Overview

Contribution ID: 12

Type: **not specified**

Pythia

Session Classification: Generator Overview

Contribution ID: **13**

Type: **not specified**

Neutrinos

Wednesday 28 June 2023 16:10 (10 minutes)

Presenter: Dr WRET, Clarence (University of Rochester (US))

Contribution ID: **14**

Type: **not specified**

ALICE

Tuesday 27 June 2023 16:50 (10 minutes)

Presenter: ZACCOLO, Valentina (Universita e INFN Trieste (IT))

Session Classification: Collaboration Experience

Contribution ID: **15**

Type: **not specified**

ePIC

Tuesday 27 June 2023 17:00 (10 minutes)

Presenter: DIEFENTHALER, Markus

Session Classification: Collaboration Experience

Contribution ID: **16**

Type: **not specified**

Community Discussion

Wednesday 28 June 2023 16:20 (30 minutes)

Status/future of tools

- Do Professor and Apprentice need to be separate entities? At what level are they expected to be maintained?
- What interest is there in other tools like MCNNTUNES?

Need for strengthening interactions between communities?

- LHC -> Nuclear -> Neutrinos -> Elsewhere?

Anything else?

Contribution ID: 17

Type: **not specified**

Generator Overview

Tuesday 27 June 2023 15:10 (50 minutes)

Presenter: Prof. SKANDS, Peter (Monash University (AU))

Session Classification: Generator Overview

Contribution ID: **18**Type: **not specified**

Tutorial

Tuesday 27 June 2023 17:20 (1h 10m)

In this session we will explore how modifying parameters in Pythia modifies observable distributions. To run the tutorial, you must have Docker installed and running on your machine. To start the tutorial, run the following in a command line:

```
docker run --rm -u 'id -u USER' --vPWD:PWD --wPWD -p 8888:8888 -it pythia8/tutorials:hsf23
```

Then, open a web browser and paste the URL given in the terminal to open up the Jupyter notebook.

Presenters: PREUSS, Christian (ETH Zürich); ILTEN, Philip (University of Cincinnati (US))

Session Classification: Tutorial - Explore a Model

Contribution ID: **19**

Type: **not specified**

Tutorial

Wednesday 28 June 2023 16:50 (1h 50m)

Presenters: BUCKLEY, Andy (University of Glasgow (GB)); ILTEN, Philip (University of Cincinnati (US))

Session Classification: Tutorial - Learning the Tools

Contribution ID: **20**

Type: **not specified**

Neutrino Physics

Presenter: Dr WRET, Clarence (University of Rochester (US))