

# **INSIGHTS Workshop on Statistics, Machine Learning and Outreach at CERN**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Introduction to C++**

*Monday, September 17, 2018 2:00 PM (1h 30m)*

**Presenter:** VERKERKE, Wouter (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Introduction to Software Development

Contribution ID: 3

Type: **not specified**

# Introduction to Python

*Monday, September 17, 2018 3:45 PM (1h 30m)*

**Presenter:** STEWART, Graeme (CERN)

**Session Classification:** Introduction to Software Development

Contribution ID: 4

Type: **not specified**

## **Welcome Reception (INSIGHTS Network Only)**

Contribution ID: 5

Type: **not specified**

# Introduction to Statistics I

*Tuesday, September 18, 2018 9:00 AM (1h 30m)*

**Presenter:** COWAN, Glen (Royal Holloway, University of London)

**Session Classification:** Introduction to Statistics and Machine Learning

Contribution ID: 6

Type: **not specified**

# Introduction to Machine Learning I

*Tuesday, September 18, 2018 11:00 AM (1h 30m)*

**Presenter:** GLEYZER, Sergei (University of Florida (US))

**Session Classification:** Introduction to Statistics and Machine Learning

Contribution ID: 7

Type: **not specified**

## **Introduction to Statistics II**

*Thursday, September 20, 2018 9:00 AM (1h 30m)*

**Presenter:** COWAN, Glen (Royal Holloway, University of London)

**Session Classification:** Introduction to Statistics and Machine Learning

Contribution ID: 8

Type: **not specified**

## **Introduction to Machine Learning II**

*Thursday, September 20, 2018 11:00 AM (1h 30m)*

**Presenter:** GLEYZER, Sergei (University of Florida (US))

**Session Classification:** Introduction to Statistics and Machine Learning



Contribution ID: 9

Type: **not specified**

## **Introduction to Statistics**

*Friday, September 21, 2018 9:00 AM (1h 30m)*

**Presenter:** COWAN, Glen (Royal Holloway, University of London)

**Session Classification:** Introduction to Statistics and Machine Learning

Contribution ID: **10**

Type: **not specified**

## **Machine Learning III**

*Friday, September 21, 2018 11:00 AM (1h 30m)*

**Presenter:** GLEYZER, Sergei (University of Florida (US))

**Session Classification:** Introduction to Statistics and Machine Learning

Contribution ID: 11

Type: **not specified**

## **Introduction and goals of the workshop**

**Presenter:** DORIGO, Tommaso (Universita e INFN, Padova (IT))

Contribution ID: 12

Type: **not specified**

## **Introduction and goals of the workshop**

*Wednesday, September 19, 2018 9:00 AM (10 minutes)*

**Presenter:** DORIGO, Tommaso (Universita e INFN, Padova (IT))

**Session Classification:** Outreach Workshop

Contribution ID: 13

Type: **not specified**

## **Outreach: Just do it**

*Wednesday, September 19, 2018 9:10 AM (30 minutes)*

**Presenter:** MEHLHASE, Sascha (Ludwig Maximilians Universitat (DE))

**Session Classification:** Outreach Workshop

Contribution ID: 14

Type: **not specified**

## Engaging formats for science events

*Wednesday, September 19, 2018 9:40 AM (30 minutes)*

Discovering researchers and research inventing or adapting communication formats to be used in science events.

From TVgames to improbable conversations some examples of outreach activities effectively used during science events such as science festival and the European Researchers' Night.

**Presenter:** Dr ALFONSI, Leonardo (Psiquadro)

**Session Classification:** Outreach Workshop

Contribution ID: 15

Type: **not specified**

## **How Did the Higgs Boson Become a Rock Star?**

*Wednesday, September 19, 2018 10:10 AM (30 minutes)*

**Presenter:** MARSOLLIER, Arnaud (CERN)

**Session Classification:** Outreach Workshop

Contribution ID: 16

Type: **not specified**

## **Measuring the impact of the Higgs**

*Wednesday, September 19, 2018 11:00 AM (30 minutes)*

**Presenter:** BUTTERWORTH, Jonathan (University College London (UK))

**Session Classification:** Outreach Workshop



Contribution ID: 17

Type: **not specified**

## **Our Universe in a Box**

*Wednesday, September 19, 2018 11:30 AM (30 minutes)*

**Presenter:** LEE, Claire (Brookhaven National Laboratory (US))

**Session Classification:** Outreach Workshop

Contribution ID: **18**

Type: **not specified**

## **Physics Outreach: Why? & How?**

*Wednesday, September 19, 2018 12:00 PM (30 minutes)*

**Presenter:** GOLDFARB, Steven (University of Melbourne (AU))

**Session Classification:** Outreach Workshop

Contribution ID: 19

Type: **not specified**

## Escaping the echo chamber

*Wednesday, September 19, 2018 12:30 PM (30 minutes)*

**Presenter:** Dr KOPPENBURG, Patrick (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Outreach Workshop

Contribution ID: **20**

Type: **not specified**

## **Lunch break**

**Session Classification:** Outreach Workshop

Contribution ID: 21

Type: **not specified**

## **Science divulgation at a literature festival**

*Wednesday, September 19, 2018 2:30 PM (30 minutes)*

**Presenter:** Dr POLETTINI, Matteo

**Session Classification:** Outreach Workshop

Contribution ID: 22

Type: **not specified**

## **The Art and Science initiative**

*Wednesday, September 19, 2018 3:00 PM (30 minutes)*

**Presenter:** Dr MENASCE, Dario (Universita & INFN, Milano-Bicocca (IT))

**Session Classification:** Outreach Workshop

Contribution ID: 23

Type: **not specified**

## **Just for the kick of it - learning by playing**

*Wednesday, September 19, 2018 3:30 PM (30 minutes)*

**Presenter:** ANTUNES PEQUENAO, Joao (CERN)

**Session Classification:** Outreach Workshop

Contribution ID: 24

Type: **not specified**

## **Abolish Outreach!**

*Wednesday, September 19, 2018 4:20 PM (30 minutes)*

**Presenter:** BEACHAM, James (Ohio State University (US))

**Session Classification:** Outreach Workshop



Contribution ID: 25

Type: **not specified**

## Panel session and conclusions

*Wednesday, September 19, 2018 4:50 PM (40 minutes)*

This session is chaired by Athina Zampara, PO of the INSIGHTS and AMVA4NewPhysics networks. All speakers are invited to a round-table discussion of the outreach actions described during the day

**Presenters:** GLEYZER, Sergei (University of Florida (US)); DORIGO, Tommaso (Universita e INFN, Padova (IT))

**Session Classification:** Outreach Workshop

Contribution ID: 26

Type: **not specified**

## **Introduction to ROOT with hands-on session**

*Tuesday, September 18, 2018 2:00 PM (1h 30m)*

**Presenter:** PIPARO, Danilo

**Session Classification:** Statistical and Data Analysis Tools

Contribution ID: 27

Type: **not specified**

## **Introduction to ROOT with hands-on session (Part 2)**

*Tuesday, September 18, 2018 4:00 PM (1h 30m)*

**Presenter:** PIPARO, Danilo

**Session Classification:** Statistical and Data Analysis Tools

Contribution ID: 28

Type: **not specified**

## **Introduction to Machine Learning Tools in ROOT**

*Thursday, September 20, 2018 2:00 PM (1h 30m)*

**Presenters:** MONETA, Lorenzo (CERN); GLEYZER, Sergei (University of Florida (US))

**Session Classification:** Hands-on Tutorials

Contribution ID: 29

Type: **not specified**

## **Tutorial (TMVA, Keras, PyKeras)**

*Thursday, September 20, 2018 4:00 PM (1h 30m)*

**Session Classification:** Hands-on Tutorials

Contribution ID: **30**

Type: **not specified**

## **Introduction to RooFit and Rootats**

*Friday, September 21, 2018 2:00 PM (1h 30m)*

**Presenter:** VERKERKE, Wouter (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Statistical and Data Analysis Tools

Contribution ID: **31**

Type: **not specified**

## **RooFit and RooStats tutorial**

*Friday, September 21, 2018 4:00 PM (1 hour)*

**Session Classification:** Statistical and Data Analysis Tools

Contribution ID: 32

Type: **not specified**

## **A CAPELLA SCIENCE event**

*Wednesday, September 19, 2018 7:00 PM (1 hour)*

**Presenter:** BLAIS, Tim

**Session Classification:** A Capella Science event