

**Advanced Artificial
Intelligence for Precision
High Energy Physics**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Machine learning techniques

Monday 17 July 2023 09:00 (2 hours)

https://www.thphys.uni-heidelberg.de/~plehn/pics/modern_ml.pdf

Presenter: PLEHN, Tilman (Heidelberg University)

Contribution ID: 2

Type: **not specified**

Quantum Chromodynamics

Monday 17 July 2023 11:30 (2 hours)

Presenter: SMILLIE, Jennifer (Higgs Centre for Theoretical Physics, Edin. U.)

Contribution ID: 3

Type: **not specified**

Click on the materials for a link to a Github repository containing all jupyter notebooks used during the tutorials

Monday 17 July 2023 15:00 (2h 30m)

Presenter: STEGEMAN, Roy

Contribution ID: 4

Type: **not specified**

Machine learning techniques

Tuesday 18 July 2023 09:00 (2 hours)

Presenter: PLEHN, Tilman (Heidelberg University)

Contribution ID: 5

Type: **not specified**

Quantum Chromodynamics

Tuesday 18 July 2023 11:30 (2 hours)

Presenter: SMILLIE, Jennifer (Higgs Centre for Theoretical Physics, Edin. U.)

Contribution ID: 6

Type: **not specified**

Tutorials: (NLO) theory predictions crash course

Tuesday 18 July 2023 15:00 (2h 30m)

Presenter: Mr SCHWAN, Christopher (Universität Würzburg)

Contribution ID: 7

Type: **not specified**

Machine learning techniques

Wednesday 19 July 2023 09:00 (2 hours)

Presenter: PLEHN, Tilman (Heidelberg University)

Contribution ID: 8

Type: **not specified**

Quantum Chromodynamics

Wednesday 19 July 2023 11:30 (2 hours)

Presenter: SMILLIE, Jennifer (Higgs Centre for Theoretical Physics, Edin. U.)

Contribution ID: 9

Type: **not specified**

Tutorials: PDF and couplings evolution

Wednesday 19 July 2023 15:00 (2h 30m)

Presenter: MAGNI, Giacomo (Nikhef, VU Amsterdam)

Contribution ID: 10

Type: **not specified**

Machine learning techniques

Thursday 20 July 2023 09:00 (2 hours)

Presenter: PLEHN, Tilman (Heidelberg University)

Contribution ID: 11

Type: **not specified**

Quantum Chromodynamics

Thursday 20 July 2023 11:30 (2 hours)

Presenter: SMILLIE, Jennifer (Higgs Centre for Theoretical Physics, Edin. U.)

Contribution ID: 12

Type: **not specified**

Machine learning techniques

Friday 21 July 2023 11:30 (2 hours)

Presenter: PLEHN, Tilman (Heidelberg University)

Contribution ID: 13

Type: **not specified**

Quantum Chromodynamics

Friday 21 July 2023 09:00 (2 hours)

Presenter: SMILLIE, Jennifer (Higgs Centre for Theoretical Physics, Edin. U.)

Contribution ID: 14

Type: **not specified**

Tutorials: Applying Machine Learning techniques to real life HEP problems

Friday 21 July 2023 15:00 (2h 30m)

Presenter: Dr CRUZ MARTINEZ, Juan M. (CERN)

Contribution ID: 15

Type: **not specified**

Bayesian methods and data analysis

Monday 24 July 2023 09:00 (2 hours)

Presenter: PIERINI, Maurizio (CERN)

Contribution ID: 16

Type: **not specified**

Quantum Machine Learning

Monday 24 July 2023 11:30 (2 hours)

Presenter: GARCIA, Artur (Barcelona Supercomputing Center)

Contribution ID: 17

Type: **not specified**

Tutorials: Bayesian inference tools

Monday 24 July 2023 15:00 (2h 30m)

Presenter: GIANI, Tommaso (Nikhef National institute for subatomic physics (NL))

Contribution ID: 18

Type: **not specified**

Bayesian methods and data analysis

Tuesday 25 July 2023 09:00 (2 hours)

Presenter: PIERINI, Maurizio (CERN)

Contribution ID: 19

Type: **not specified**

Quantum Machine Learning

Tuesday 25 July 2023 11:30 (2 hours)

Presenter: GARCIA, Artur (Barcelona Supercomputing Center)

Contribution ID: 20

Type: **not specified**

Tutorials: Quantum computing

Tuesday 25 July 2023 15:00 (2h 30m)

Presenter: PASQUALE, Andrea (University of Milan)

Contribution ID: 21

Type: **not specified**

Bayesian methods and data analysis

Wednesday 26 July 2023 09:00 (2 hours)

Presenter: PIERINI, Maurizio (CERN)

Contribution ID: 22

Type: **not specified**

Quantum Machine Learning

Wednesday 26 July 2023 11:30 (2 hours)

Presenter: GARCIA, Artur (Barcelona Supercomputing Center)

Contribution ID: 23

Type: **not specified**

Tutorials: Quantum Machine Learning

Wednesday 26 July 2023 15:00 (2h 30m)

Presenter: ROBBIATI, Matteo (Università degli Studi e INFN Milano (IT))

Contribution ID: 24

Type: **not specified**

Bayesian methods and data analysis

Thursday 27 July 2023 09:00 (2 hours)

Presenter: PIERINI, Maurizio (CERN)

Contribution ID: 25

Type: **not specified**

Quantum Machine Learning

Thursday 27 July 2023 11:30 (2 hours)

Presenter: GARCIA, Artur (Barcelona Supercomputing Center)

Contribution ID: 26

Type: **not specified**

Tutorials: Exercise - SM Bayesian fit

Thursday 27 July 2023 15:00 (2h 30m)

Presenter: CANDIDO, Alessandro

Contribution ID: 27

Type: **not specified**

Bayesian methods and data analysis

Friday 28 July 2023 09:00 (2 hours)

Presenter: PIERINI, Maurizio (CERN)

Contribution ID: 28

Type: **not specified**

Quantum Machine Learning

Friday 28 July 2023 11:30 (2 hours)

Presenter: GARCIA, Artur (Barcelona Supercomputing Center)

Contribution ID: 29

Type: **not specified**

Tutorials

Contribution ID: 30

Type: **not specified**

Tutorials: Machine Learning 101: using ML concepts and techniques for regression and classification

Thursday 20 July 2023 15:00 (2h 30m)

Presenter: BARONTINI, Andrea (Università degli studi di Milano)