

Second ML-INFN Hackathon: Starting Level



Report of Contributions

Contribution ID: 1

Type: **not specified**

What is Machine Learning and why it is relevant for research?

Monday, 13 December 2021 09:20 (50 minutes)

Presenter: PIERINI, Maurizio (CERN)

Session Classification: Introduction

Contribution ID: 2

Type: **not specified**

Neural Networks: principles and common architectures

Monday, 13 December 2021 10:10 (1h 5m)

Presenter: GIAGU, Stefano (ROMA1)

Session Classification: Introduction

Contribution ID: 3

Type: **not specified**

Cloud Computing and Cloud-INFN

Session Classification: Introduction

Contribution ID: 4

Type: **not specified**

INFN-Cloud, and how to use it for ML-INFN

Monday, 13 December 2021 11:30 (1 hour)

Presenter: SPIGA, Daniele (PG)

Session Classification: Introduction

Contribution ID: 5

Type: **not specified**

Playing with CERN Open Data with numpy, pandas and pyplot

Presenter: ANDERLINI, Lucio (FI)

Session Classification: Hands-on

Contribution ID: 6

Type: **not specified**

Hands-on - Playing with CERN Open Data with numpy, pandas and pyplot

Monday, 13 December 2021 13:45 (1h 15m)

Presenter: ANDERLINI, Lucio (FI)

Session Classification: Hands-on

Contribution ID: 7

Type: **not specified**

Introduction to keras

Monday, 13 December 2021 15:00 (30 minutes)

Presenters: RIZZI, Andrea (INFN Pisa); RIZZI, Andrea (PI)

Session Classification: Hands-on

Contribution ID: 8

Type: **not specified**

Hands-on - Introduction to keras

Monday, 13 December 2021 15:30 (45 minutes)

Presenters: RIZZI, Andrea (PI); RIZZI, Andrea (INFN Pisa)

Session Classification: Hands-on

Contribution ID: 9

Type: **not specified**

ML Basics: hands-on on a simple categorization example in HEP

Tuesday, 14 December 2021 09:50 (40 minutes)

Presenter: ANDERLINI, Lucio (FI)

Contribution ID: **10**

Type: **not specified**

ML for applications in medical physics of INFN interest

Tuesday, 14 December 2021 12:40 (30 minutes)

Presenter: RETICO, Alessandra (PI)

Contribution ID: **11**

Type: **not specified**

ML for applications in High Energy Physics

Tuesday, 14 December 2021 09:00 (50 minutes)

Presenter: BOCCALI, Tommaso (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 12

Type: **not specified**

Discrimination of hadronic jets from light and heavy flavours @ LHC

Wednesday, 15 December 2021 09:00 (10 minutes)

Presenter: BOCCALI, Tommaso (PI)

Session Classification: Hackathon introduction

Contribution ID: 13

Type: **not specified**

Autoencoders for VIRGO GW signal analysis

Wednesday, 15 December 2021 09:20 (10 minutes)

Presenter: DI RENZO, Francesco (P)

Session Classification: Hackathon introduction

Contribution ID: 14

Type: **not specified**

Classification of lesions in medical physics

Wednesday, 15 December 2021 09:30 (10 minutes)

Presenter: RETICO, Alessandra (PI)

Session Classification: Hackathon introduction

Contribution ID: 15

Type: **not specified**

Introduction and logistics

Monday, 13 December 2021 09:00 (20 minutes)

Presenter: BOCCALI, Tommaso (PI)

Contribution ID: **16**

Type: **not specified**

How to access INFNCloud

Presenters: SPIGA, Daniele (PG); DUMA, Doina Cristina (CNAF)

Contribution ID: 17

Type: **not specified**

Signal/background discrimination for the VBF Higgs four lepton decay channel with the CMS experiment

Wednesday, 15 December 2021 09:10 (10 minutes)

Presenter: D'ANZI, Brunella (Istituto Nazionale di Fisica Nucleare)

Session Classification: Hackathon introduction