# How to arrive

All information at the following  $\underline{\text{LINK}}$ 

# Accommodation

The fee covers five nights (all meals included).

check-in : July 14, (starting from 12:00 am)

check-out : July 19

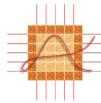
Any extension to stay at CEUB cannot be considered due to lack of availability.

# Acknowledgment

We acknowledge AMASES and SoBigData++ ("INFRAIA-01-2018-2019—Integrating Activities for Advanced Communities," Grant No. 871042, "SoBigData++: European Integrated Infrastructure for Social Mining and Big Data Analytics").

# Contact

Organizers: Email: summer.school.amases2024@gmail.com Website: https://www.amases.org/amases-summer-school-2024/ Reception institution (CEUB): Email: segreteria@ceub.it Tel: +39 0543.446500



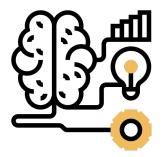
A.M.A.S.E.S. Associazione per la Matematica Applicata alle Scienze Economiche e Sociali

Association for Mathematics Applied to Social and Economic Sciences



# Summer School in

Machine learning methods for finance



July 14-19 2024 at CEUB Bertinoro, Via Aldruda Frangipane, 6, 47032 Bertinoro FC

#### Eshagh Jahangiri

5:00 pm Coffee break5:30 pm Python lab cont'd8:30 pm Dinner

• July 17

9:00 am Lecture (4h) on Reservoir computing for time series analysis

### Giulia Livieri

11:00 am Coffee break
11:30 am Lecture cont'd
1:00 pm Lunch
3:00 pm Python lab (4h) on reservoir computing

#### Giulia Livieri

5:00 pm Coffee break
5:30 pm Python lab cont'd
8:30 pm Social dinner of the AMASES School

#### • July 18

**9:00 am** Lecture (4h) on Advanced probability and machine learning techniques for mathematical finance

#### Sara Svaluto-Ferro

11:00 am Coffee break
11:30 am Lecture cont'd
1:00 pm Lunch
3:00 pm Python lab (4h) on signature of a stochastic process and applications to pricing

#### Andrea Stanghellini

5:00 pm Coffee break5:30 pm Python lab cont'd8:30 pm Dinner

#### • July 19

9:00 am Python labs and networking (4h)1:00 pm Lunch

# Program

# • July 14

2:00 pm Welcome3:00 pm Crash course (2h) on artificial neural networks

#### Piero Mazzarisi

**5:30 pm** Python lab (2h) on artificial neural networks with applications to option pricing

Federico Gatta

 $8{:}00 \ pm \ {\rm Dinner}$ 

• July 15

 $9{:}00~\mathrm{am}$  Lecture (4h) on machine learning in finance

## Blanka Horvath

 ${\bf 11:} {\bf 00} \ {\bf am} \ {\rm Coffee} \ {\rm break}$ 

11:30~am Lecture cont'd

1:00 pm Lunch

**3:00 pm** Python lab (4h) on Deep pricing and calibration

## Fabio Baschetti

5:00 pm Coffee break5:30 pm Python lab cont'd8:30 pm Dinner

## • July 16

**9:00 am** Lecture (4h) on Basics of Reinforcement learning for financial applications

#### Marco Corazza

11:00 am Coffee break
11:30 am Lecture cont'd
1:00 pm Lunch
3:00 pm Python lab (4h) on reinforcement learning