

**Erice International School on
Complexity: the XVIII Course
"Machine Learning approaches
for complexity"**

Report of Contributions

Contribution ID: 3

Type: **not specified**

Looking into the Pandora Box: The Generalization Problem

Tuesday, 23 April 2024 09:00 (2 hours)

Presenter: FABROCINI, Filippo (Tongji University, China)

Contribution ID: 4

Type: **not specified**

Network geometry

Tuesday, 23 April 2024 11:30 (1 hour)

Presenter: CANNISTRACI, Carlo (Tsinghua University, Beijing, China)

Contribution ID: 5

Type: **not specified**

Large Language Models and Deep Learning for computer vision and time series: from academia to industry - I

Tuesday, 23 April 2024 14:00 (2 hours)

Presenter: FREITAS, Felipe (EDF Energy, London, UK)

Contribution ID: 6

Type: **not specified**

Neural networks, quantum systems, and gravity

Tuesday, 23 April 2024 16:30 (2 hours)

Presenter: HASHIMOTO, Koji (Kyoto University, Japan)

Contribution ID: 7

Type: **not specified**

Quantum Machine Learning

Wednesday, 24 April 2024 09:00 (2 hours)

Presenter: CARUSO, Filippo (University of Firenze, Italy)

Contribution ID: 8

Type: **not specified**

Network topology and sparse training

Wednesday, 24 April 2024 11:30 (1 hour)

Presenter: CANNISTRACI, Carlo (Tsinghua University, Beijing, China)

Contribution ID: 9

Type: **not specified**

Applications of Fourier analytic Barron Space Theory

Wednesday, 24 April 2024 14:00 (2 hours)

Presenter: MILLER, Jonathan Andrew (Euler Scientific, Fremont, CA, USA)

Contribution ID: **10**

Type: **not specified**

Large Language Models and Deep Learning for computer vision and time series: from academia to industry - II

Wednesday, 24 April 2024 16:30 (2 hours)

Presenter: FREITAS, Felipe (EDF Energy, London, UK)

Contribution ID: 11

Type: **not specified**

Data driven tools for Eulerian and Lagrangian Turbulence

Thursday, 25 April 2024 09:00 (2 hours)

Presenter: BIFERALE, Luca (Università di Roma Tor Vergata, Italy)

Contribution ID: 12

Type: **not specified**

Data driven tools for Eulerian and Lagrangian Turbulence

Thursday, 25 April 2024 11:30 (1 hour)

Presenter: BIFERALE, Luca (Università di Roma Tor Vergata, Italy)

Contribution ID: 13

Type: **not specified**

Analytical approaches to the learning dynamics of neural networks - I

Thursday, 25 April 2024 14:00 (2 hours)

Presenter: GOLDT, Sebastian (International School of Advanced Studies, Trieste, Italy)

Contribution ID: 14

Type: **not specified**

Data, relations and their shape

Thursday, 25 April 2024 16:30 (2 hours)

Presenter: SAZDANOVIC, Radmila (North Carolina State University, Raleigh, NC, USA)

Contribution ID: 15

Type: **not specified**

Data modeling with Energy Based Models

Friday, 26 April 2024 09:00 (2 hours)

Presenter: BARTOLOMÉ, Beatriz Seoane (Paris-Saclay University, France)

Contribution ID: **16**

Type: **not specified**

On the effect of MCMC in the training of EBM

Friday, 26 April 2024 11:30 (1 hour)

Presenter: BARTOLOMÉ, Beatriz Seoane (Paris-Saclay University, France)

Contribution ID: 17

Type: **not specified**

Flash talk: Predicting trainability of neural networks by tracing information flows

Friday, 26 April 2024 12:30 (30 minutes)

Presenter: THURN, Yanick (Julius-Maximilians university of Wuerzburg)

Contribution ID: **18**

Type: **not specified**

Statistical Physics for Machine Learning

Saturday, 27 April 2024 09:00 (2 hours)

Presenter: DECELLE, Aurélien (Universidad Complutense, Madrid, Spain)

Contribution ID: **19**

Type: **not specified**

From Sparse Modeling to Sparse Communication

Saturday, 27 April 2024 11:30 (1 hour)

Presenter: MARTINS, Andre (Instituto Superior Técnico, Lisbon, Portugal)

Contribution ID: 20

Type: **not specified**

Analytical approaches to the learning dynamics of neural networks - II

Saturday, 27 April 2024 14:00 (2 hours)

Presenter: GOLDT, Sebastian (International School of Advanced Studies, Trieste, Italy)

Contribution ID: 21

Type: **not specified**

Modelling complex systems as interacting agents

Saturday, 27 April 2024 16:30 (2 hours)

Presenter: FIELDS, Christopher (Tufts University, Medford, MA, US)