MC9   Machine learning in soft condensed matter I

Monday, 2 September, morning

Chair(s): Cristóvão Dias

Room:

Hours	ID	Name	Type	Title
10h30-11h00	13421	Frank Cichos	Invited	Harnessing Active Particles for Computations
11h00-11h30	12367	Laura Natali	Invited	Decentralised learning in a swarm of autonomous robots
11h30-12h00	12372	Tristan Bereau	Invited	Transferable coarse-grained models accelerate chemical-space exploration
12h00-12h30	13222	Andreas Zöttl	Invited	Reinforcement learning of microswimmers with genetic algorithms
12h30-13h00	15985	Daniel Midtvedt	Invited	Investigating weak interactions with deep learning enhanced quantitative microscopy

MC9   Machine learning in soft condensed matter II

Tuesday, 3 September, morning

Chair(s): Giovanni Volpe

Room:

Hours	ID	Name	Type	Title
10h30-11h00	12404	Kristian Gustavsson	Invited	Efficient navigation of microswimmers in turbulence
11h00-11h30	12489	Giorgio Volpe	Invited	Sampling rare events using unsupervised neural networks
11h30-12h00	13030	Miguel Ruiz-García	Invited	Applying soft-matter physics to machine learning: Dynamical loss functions and catastrophic forgetting
12h00-12h30	15981	Rute Ferreira	Invited	Machine Learning-Driven Materials Design for Optimizing Solar Harvesting in Luminescent Solar Concentrators
12h30-13h00	13596	Adam Carter	Invited	Colloidal Dynamics from Microscopy: Tracking vs Box Counting vs DDM

MC9   Machine learning in soft condensed matter III

Wednesday, 4 September, morning

    Chair(s): Rodrigo Coelho

    Room:

Hours	ID	Name	Type	Title
10h30-11h00	12388	Daniel de las Heras	Invited	Machine learning inverse problems in nonequilibrium many-body soft matter systems
11h00-11h30	12747	Nuno Araújo	Invited	Self-folding kirigami at the microscale
11h30-12h00	15567	Carlo Manzo	Invited	Deep Learning Approaches for Biological Dynamics
12h00-12h15	13195	Jaka Zaplotnik	Oral	Neural networks for identification of liquid crystal elastic constants and structures from optical measurements
12h15-12h30	12616	João L C Grade Neves	Oral	Mapping the discrete configurational space of kirigami folding
12h30-12h45	13221	Bappaditya Roy	Oral	Learning hydrodynamic equations from the collective behavior of active Brownian particles

Poster Session

Monday, 2 September

ID	Name	Title
13830	Vladimir Palyulin	First-Passage Time Minimization with Q-Learning in Heated Gridworlds
13754	Cristóvão Dias	Coarse-grained simulations of the flocking of active skyrmions
13420	Frank Cichos	Active Particle Steering by Actor Critic Reinforcement Learning
13207	Débora Batista Mendes	Numerical simulations of a neuromorphic spike-based autoencoder
15995	Helder Esteves	Particle-based simulations of active liquid-crystal Skyrmions using ML potentials