

Probabilistic sampling for physics: finding needles in a field of high-dimensional haystacks

lundi 4 septembre 2023

Challenge and Perspective: Tony Lelièvre - Amphitheatre (11:30 - 12:30)

time	[id] title	presenter
11:30	[17] Finding saddle points of energy landscapes: why and how?	LELIEVRE, Tony

Challenge and Perspective: Pierre Monmarché - Amphitheatre (14:00 - 15:00)

time	[id] title	presenter
14:00	[9] Exploration with saddle point search	MONMARCHE, Pierre

Challenge and Perspective: Thomas Swinburne - Amphitheatre (15:30 - 16:30)

time	[id] title	presenter
15:30	[18] Predicting the atomic kinetics of materials with uncertainty	SWINBURNE, Thomas

mardi 5 septembre 2023

Challenge and Perspective: Martin Weigel - Amphitheatre (10:00 - 11:00)

time	[id] title	presenter
10:00	[3] Population Monte Carlo as a meta-algorithm	WEIGEL, Martin

Challenge and Perspective: Misaki Ozawa - Amphitheatre (11:30 - 12:30)

time	[id] title	presenter
11:30	[5] Sampling glassy disordered systems	OZAWA, Misaki

Challenge and Perspective: Manon Michel - Amphitheatre (14:00 - 15:00)

time	[id] title	presenter
14:00	[15] Upgrading MCMC dynamics by necessary symmetries and non-reversibility	MICHEL, Manon

mercredi 6 septembre 2023

Challenge and Perspective: Grant Rotskoff - Amphitheatre (11:30 - 12:30)

time	[id] title	presenter
11:30	[4] Sampling with generative models	ROTSKOFF, Grant

Challenge and Perspective: Beatriz Seoane - Amphitheatre (14:00 - 15:00)

time	[id] title	presenter
14:00	[12] The effect of Monte Carlo Sampling in the training of Energy Based Models	SEOANE BARTOLOMÉ, Beatriz

Challenge and Perspective: Marylou Gabrié - Amphitheatre (15:30 - 16:30)

time	[id] title	presenter
15:30	[8] Opportunities and challenges in enhancing sampling with generative models	GABRIÉ, Marylou

jeudi 7 septembre 2023

Challenge and Perspective: Feliks Nüske - Amphitheatre (10:00 - 11:00)

time	[id] title	presenter
10:00	[11] Dimensionality Reduction and Metastability Analysis using the Koopman Operator	NÜSKE, Feliks

Challenge and Perspective: Virginie Ehlacher - Amphitheatre (14:00 - 15:00)

time	[id] title	presenter
14:00	[19] Sparse approximation of the Lieb functional in DFT with moment constraints	EHLACHER, Virginie

Challenge and Perspective: Alain Durmus - Amphitheatre (15:30 - 16:30)

time	[id] title	presenter
15:30	[6] Barrier Hamiltonian Monte Carlo	DURMUS, Alain

lundi 11 septembre 2023

Challenge and Perspective: Gabriel Stoltz - Amphitheatre (10:00 - 11:00)

time	[id] title	presenter
10:00	[20] Optimizing the diffusion for sampling with overdamped Langevin dynamics Gabriel Stoltz (CERMICS ,Ecole des Ponts and Matherials, Inria Paris)	STOLTZ, Gabriel

Challenge and Perspective: Danny Perez - Amphitheatre (11:30 - 12:30)

time	[id] title	presenter
11:30	[10] Dynamically-accurate biasing using Accelerated Molecular Dynamics	Dr PEREZ, Danny

Challenge and Perspective: Mihai Cosmin Marinica - Amphitheatre (14:00 - 15:00)

time	[id] title	presenter
14:00	[40] Sampling Complex Energy Landscapes in Material Science Using Data-Driven Force Fields - Mihai Cosmin Marinica	

mardi 12 septembre 2023

Challenge and Perspective: Tim Garoni - Amphitheatre (10:00 - 11:00)

time	[id] title	presenter
10:00	[7] Limiting distributions of Glauber coupling times	GARONI, Tim

Challenge and Perspective: Pierre Jacob - Amphitheatre (11:30 - 12:30)

time	[id] title	presenter
11:30	[21] Coupling methods to de-bias and assess MCMC algorithms	JACOB, Pierre

Challenge and Perspective: Frédéric Cazals - Amphithéâtre (14:00 - 15:00)

time	[id] title	presenter
14:00	[47] Sampling protein structure	CAZALS, Frederic