

Hammers & Nails 2023 - Swiss Edition

Monday 30 October 2023

Invited speakers (09:30 - 12:15)

time	[id] title	presenter
09:30	[1] Highlights of machine learning in particle physics for computer scientists	GOUSKOS, Loukas
10:30	Coffee break	
11:00	[2] Interdisciplinary Machine Learning for Fundamental Physics	PETTEE, Mariel

Invited speakers (14:00 - 15:15)

time	[id] title	presenter
14:00	[6] Geometric Algebra Transformers: A Universal Architecture of Geometric Data	COHEN, Taco

Tuesday 31 October 2023

Invited speakers (09:00 - 12:00)

time	[id] title	presenter
09:00	[7] AI & material science	NOVOSELOV, Kostya
10:00	Coffee break	
10:30	[8] Machine learning: bridging scale gap between the worlds of materials and particles	USTYUZHANIN, Andrey
11:15	[5] Reduction and Closure of Dynamical Systems using Deep Learning	LI, Qianxiao

Wednesday 1 November 2023

Invited speakers (10:30 - 12:10)

time	[id] title	presenter
10:30	[14] The Vision of End-to-End ML models in HEP	HEINRICH, Lukas Alexander
11:20	[58] Toward Building Large HEP Models with Self-Supervised Learning	KAGAN, Michael

Invited speakers (13:15 - 14:30)

time	[id] title	presenter
13:15	[25] Simulation-based inference and the places it takes us	MACKKE, Jakob

Invited speakers (14:30 - 19:00)

time	[id] title	presenter
14:30	[16] Generative Models - The Key to Manipulating Implicit Distribution for Bayesian Inference	LANUSSE, Francois
15:45	Coffee break	
16:15	[26] Strong Lensing Data Analysis in the Era of Large Sky Surveys	LEVASSEUR, Laurence
17:30	[10] Image Denoising - Not What You Think	ELAD, Michael

Thursday 2 November 2023

Invited speakers (09:00 - 12:30)

time	[id] title	presenter
09:00	[13] Machine learning for the LHC Simulation Chain	WINTERHALDER, Ramon
10:15	Coffee break	
10:45	[34] Bigger data, shorter time: Real-time inference on specialised hardware for scientific discovery	AARRESTAD, Thea AARRESTAD, Thea
12:00	[4] Aspects of Deep Learning in Particle Flow	GROSS, Eilam DREYER, Etienne

Invited speakers: Invited speakers (14:00 - 18:15)

time	[id] title	presenter
14:00	[69] Learning Image Representations Without Manual Annotations and Related Applications	BOJANOWSKI, Piotr
15:15	Coffee break	
15:45	[70] Calibrated uncertainty quantification in simulator-based inference	LEE, Ann
17:00	[71] Foundation models for science	HO, Shirley

Friday 3 November 2023

Invited speakers (09:00 - 12:00)

time	[id] title	presenter
09:00	[17] Open problems in generative models	POCZOS, Barnabas
10:15	Coffee break	
10:45	[18] Normalizing flows, diffusion and annealing importance sampling	MATTHEWS, Alexander