

	Monday, August 8, 2022	Tuesday, August 9, 2022
8:30–9:00am	Breakfast	Breakfast
9:00–9:30am	Welcome/Introduction from IAIFI Director, Jesse Thaler	Day 2 Welcome from IAIFI Director, Jesse Thaler
9:30–10:00am	Sébastien Racanière, Staff Research Engineer, DeepMind: Generative models with symmetries for physics	Fabian Ruehle, Assistant Professor, Northeastern University: Machine Learning for formal theory
10:00–10:30am	Coffee break	Coffee break
10:30–11:00am	Claudius Krause, Postdoctoral Associate, Rutgers University	Jennifer Ngadiuba, Wilson Fellow, Fermilab: Boosting sensitivity to new physics at the LHC with anomaly detection
11:00am–11:30am	Phil Harris, Assistant Professor of Physics, MIT	Siamak Ravanbakhsh, Assistant Professor, School of Computer Science, McGill University: Learning with Unknown and Nonlinear Symmetry Transformations
11:30am–12:00pm		
12:00–12:30pm	Lunch	Lunch
12:30–1:00pm		
1:00–1:30pm	Greg Yang, Senior Researcher, Microsoft Research: The unreasonable effectiveness of mathematics in large scale deep learning	Poster Session
1:30–2:00pm	Kazuhiro Terao, Staff Scientist, Stanford University	
2:00–2:30pm		
2:30–3:00pm	Coffee Break	Shuchin Aeron, Associate Professor, Tufts University: Towards learning generative models for high energy physics
3:00–3:30pm	Cora Dvorkin, Associate Professor, Harvard University: Mining Cosmological Data: Looking for Physics Beyond the Standard Model	
3:30–4:00pm	Poster Session	Yi-Zhuang You, Assistant Professor, University of California, San Diego: Machine Learning Renormalization Group and Its Applications
4:00–4:30pm		
4:30–5:00pm		Marco Cavaglia, Professor, Missouri S&T: Machine Learning for Gravitational Waves
5:00–5:30pm		
5:30–6:00pm	Break	Closing remarks from Jesse Thaler, IAIFI Director
6:00–8:00pm	Workshop Dinner	