

ICANN 25



VYTAUTAS
MAGNUS
UNIVERSITY
MCMXXII



EBRAINS

34th International Conference on Artificial Neural Networks ICANN 2025

Kaunas, Lithuania
9-12 September 2025

<https://e-nns.org/icann2025/>

General Chairs:

Yoshua Bengio (Université de Montréal, Canada)
Viktor Jirsa (Aix-Marseille Université, France; EBRAINS CSO)

Program Chairs:

Walter Senn (University of Bern, Switzerland)
Alessandro Villa (University of Lausanne, Switzerland)
Igor Tetko (Helmholtz Munich, Germany)
Marcello Sanguineti (University of Genoa, Italy)
Ausra Saudargiene (Lithuanian University of Health Sciences, Kaunas, Lithuania)

Local Organizers:

Ausra Saudargiene (Lithuanian University of Health Sciences, Kaunas, Lithuania)
Linas Petkevičius (Vilnius University, Vilnius; Artificial intelligence Association of Lithuania)

International Conference on Artificial Neural Networks ICANN 2025

Tuesday, 9 September 2025

Vytautas Magnus University, Daukanto str. 28, Kaunas, Lithuania

8.00 - 9.00	Registration		
9.00 - 10.30	Tutorials		
	<i>The Virtual Brain</i> Spase Petkoski (Aix-Marseille University, France)	<i>Dynamic Field Theory</i> Gregor Schöner (Ruhr-Universität Bochum, Germany)	
10.30 - 11.00	Coffee Break		
11.00 - 12.00	Tutorials		
	<i>The Virtual Brain</i> Marmaduke Woodman (Aix-Marseille University, France)	<i>Dynamic Field Theory</i> Gregor Schöner (Ruhr-Universität Bochum, Germany)	
12.00 - 13.00	Lunch		
13.00 - 15.00	Tutorials		
	<i>GFlownets</i> Emmanuel Bengio (Valence Labs/Recursion, Canada)	<i>Simulated Bayesian Inference</i> Michael Deistler (Machine Learning in Science, University of Tübingen, Germany)	<i>Brain Visual Decoding with Generative Models</i> Weihao Xia (University of Cambridge, UK) Cengiz Öztireli (University of Cambridge, UK)
15.00 - 15.30	Coffee Break		
15:30 - 17.00	Tutorials		
	<i>GFlownets</i> Emmanuel Bengio (Valence Labs/Recursion, Canada)	<i>Simulation-based Bayesian Inference</i> Michael Deistler (Machine Learning in Science, University of Tübingen, Germany)	<i>Brain Visual Decoding with Generative Models</i> Weihao Xia (University of Cambridge, UK) Cengiz Öztireli (University of Cambridge, UK)
17.00 - 17.30	Coffee Break		
17.30 - 18.00	Opening and Welcome		
	Stefan Wermter (President of the European Neural Network Society) Juozas Augutis (Rector of Vytautas Magnus University)		
18.00 - 19.00	Opening Keynote Lecture on AI Extracting Causality		
	<i>Causal Representations, World Models and Digital Twins</i> Bernhard Schölkopf (Max Planck Institute for Intelligent Systems, Tübingen, Germany)		
19.00 - 21.00	Concert & Welcoming Reception at Vytautas Magnus University		

International Conference on Artificial Neural Networks ICANN 2025

Wednesday, 10 September 2025

Vytautas Magnus University, Daukanto str. 28, Kaunas

7.30 - 8.30	Registration
8.30 - 9.00	Opening and Welcome Viktor Jirsa (EBRAINS Chief Science Officer) Rimantas Benetis (Rector of Lithuanian University of Health Sciences, LSMU) Arimantas Tamašauskas (Director of Neuroscience Institute, LSMU)
9.00 - 10.00	Keynote Lecture on Neuroscience and Whole Brain Simulations <i>Virtual Brain Twins for Health and Disease</i> Viktor Jirsa (Aix-Marseille University, France)
10.00 - 10.30	Coffee Break
10.30 - 12.00	Invited Talks EBRAINS Morning Session
10.30 - 11.15	<i>Teacher Propagation Through Space, Time and the Brain</i> Mihai Petrovici (NeuroTMA Lab, University of Bern, Switzerland)
11.15 - 12:00	<i>Engineering Brain Activity Patterns for Therapeutics</i> Mehmet Fatih Yanik (ETH Zurich, Switzerland, remote)
12.00 - 13.00	Lunch
13.00 - 15.00	Public Keynote Lecture & Panel Discussion
13.00 - 14.00	Public Keynote Lecture on Ethics in AI & Neuroscience <i>Neuroscience and AI for a Flourishing Life</i> Christiane Woopen (University of Bonn, Germany)
14.00 - 15.00	Public Panel Discussion Where does AI lead to? Opportunities and Risks Bernhard Schölkopf, Christiane Woopen, Viktor Jirsa, Gintare Dziugaite, Yoshua Bengio (remote)
15.00 - 15.30	Coffee Break
15.30 - 17.00	Invited talks AI Afternoon Session
15.30 - 16.00	<i>Building Mechanistic Models of Neural Computations with Simulation-based Machine Learning</i> Michael Deistler (Machine Learning in Science, University of Tübingen, Germany)
16.00 - 16.30	<i>Scalable Strategies for AI Oversight of AI - Progress, Pitfalls and Path Forward</i> Ameya Pandurang Prabh (Tübingen AI Center, University of Tübingen, Germany)
16.30 - 17.00	<i>Embodied Reasoning in the Physical World</i> Ignas Budvytis (University of Cambridge, UK)
17.00 - 19.00	Poster Sessions & Coffee
	Poster Session 1 Poster Session 2
20.00 - 22.00	Gala Dinner at Science Island, Kaunas, Lithuania

International Conference on Artificial Neural Networks ICANN 2025

Thursday, 11 September 2025

Vytautas Magnus University, Daukanto str. 28, Kaunas

8.00 - 9.00	Registration			
9.00 - 11. 00	Keynote Lectures on AI			
9.00 - 10.00	<i>AI and Generative Models</i> Emmanuel Bengio (Valence Labs/Recursion, Canada)			
10.00 - 11.00	<i>On Memorization and Unlearning</i> Gintare Dziugaite (DeepMind, USA)			
11.00 - 11.30	Coffee Break			
11:30 - 13.00	Parallel Sessions & Workshop			
	Parallel Session 1 <i>Federated, Graph, and Edge Intelligence</i>	Parallel Session 2 <i>Scientific and Physics-Informed Machine Learning</i>	Workshop 1 <i>AI in Drug Discovery</i> Igor Tetko (Helmholtz Munich, Germany)	
13.00 - 14.00	Lunch			
14.00 - 15:30	Parallel Sessions & Workshop			
	Parallel Session 3 <i>Spiking and Neuromorphic Intelligence</i>	Parallel Session 4 <i>Reinforcement Learning and Control Systems</i>	Workshop 2 <i>AI in Drug Discovery</i> Igor Tetko (Helmholtz Munich, Germany)	Workshop 3 <i>Graph Neural Networks</i>
15.30 - 16.00	Coffee Break			
16.00 - 17.00	Parallel Sessions			
	Parallel Session 5 Robustness, Generalization, and Out - of-Distribution Learning	Parallel Session 6 <i>Symbolic Reasoning, Explainability, and Structured Systems</i>	Parallel Session 7 <i>Foundations and Advances in Neural Network Architectures</i>	Workshop 4 <i>Graph Neural Networks</i>
17.00 - 18.00	Keynote Lecture on AI			
	<i>A Journey through Efficient Deep Learning on Graphs</i> Alessio Micheli (University of Pisa, Italy)			
18.00 – 19.00	European Neural Network Society ENNS General Assembly Meeting* Best Paper Award			
20.00	Sport Evening at Zalgirio Arena, Kaunas, Lithuania			

*For all persons registered to ICANN 2025

International Conference on Artificial Neural Networks ICANN 2025

Friday, 12 September 2025

Lithuanian University of Health Sciences, Sukilėlių str. 13, Kaunas, Lithuania

9.00 - 10.00	Registration	
10.00 - 12.00	Workshops	
	<i>3rd International Workshop on Reservoir Computing</i> Domenico Tortorella (University of Pisa, Italy)	<i>Special Session on Neurorobotics</i> Kristina Malinovska (Comenius University in Bratislava, Slovakia)
12.00 - 13.00	Lunch Break	
13.00 - 15.00	Workshops	
	<i>3rd International Workshop on Reservoir Computing</i> Domenico Tortorella (University of Pisa, Italy)	<i>Special Session on Neurorobotics</i> Kristina Malinovska (Comenius University in Bratislava, Slovakia)
15.00 - 16.00	Closing Remarks and Farewell	