



Machine Learning in Science

Annual Conference 2022 – Poster Session

Tuesday, July 12, 2022, 4:30 to 6:30 pm

Venue: Westspitze, Eisenbahnstraße 1, 72072 Tübingen

Authors	Title
Seth Axen, Alexandra Gessner, Elena Sizana Hanqi Zhou, Álvaro Tejero Cantero	<i>The ML \rightleftharpoons Science Colaboratory</i>
Valentyn Boreiko, Hanna Faber, Indu Ilanchezian, Murat Seckin Ayhan, Sarah Müller, Lisa Koch, Matthias Hein, Philipp Berens	<i>Counterfactual explanations of decisions of deep neural networks with applications in medical diagnostics</i>
Klara Burger, Peter Pfaffelhuber, Franz Baumdicker	<i>NNs for Self-Adjusting Mutation Rate Estimation</i>
Francesco Carnazza, Sabine Andergassen, Igor Lesanowsky	<i>Understanding quantum effects in neural network models through ML</i>
Maximilian Dax, Stephen Green, Jonathan Gair, Jakob Macke, Alessandra Buonanno, Bernhard Schölkopf	<i>Amortized Bayesian inference of gravitational waves with normalizing flows</i>
Jonas Ditz, Nico Pfeiffer, Matthias Schwab	<i>Extending deep kernel approaches for better prediction and understanding of ADME phenotypes and related drug response</i>
Jonathan Fuhr, Dominik Papies, Philipp Berens	<i>Applied Causal Inference in Social Sciences and Medicine</i>
Zohreh Ghaderi, Leonard Salewski, Harald Baayen, Hendrik P. A. Lensch	<i>End-to-End Transformer-based Model for Diverse Video Captioning</i>
Rita González Márquez, Philipp Berens, Dmitry Kobak	<i>Visualizing the landscape of biomedical literature</i>
Christian Gumbsch, Maurits Adam, Birgit Elsner, Georg Martius, Martin V. Butz	<i>Learning Latent Event Codes for Robust Planning and Hierarchical Prediction</i>

Moritz Haas, Ulrike von Luxburg, Bedartha Goswami	<i>Pitfalls of Climate Network Construction: A Statistical Perspective</i>
Lisa M. Koch, Christian M. Schürch, Arthur Gretton, Philipp Berens	<i>Hidden in plain sight: subgroup shifts escape OOD detection</i>
Jakob Kruse, Beatrice Ellerhoff, Ullrich Köthe, Jonathan Wider, Nils Weitzel, Kira Rehfeld	<i>Climate variability across space and time: Predicting extremes and water isotopes</i>
David Künstle, Felix Wichmann	<i>Machine learning approaches for psychophysics with ordinal comparisons</i>
Janne K. Lappalainen, Fabian D. Tschopp, Sridhama Prakhya, Mason McGill, Aljoscha Nern, Kazunori Shinomiya, Shin-ya Takemura, Eyal Gruntman, Nathan Klapoetke, Jakob H. Macke, Srinivas C. Turaga	<i>Cell-type specific visual selectivity emerges through connectivity and task constraints</i>
Michael Nagel, Lukas Fischer, Augustin Kelava, Tim Pawlowski	<i>Emotional cues and alcohol use: evidence from intensive longitudinal multilevel data in sports</i>
Kerstin Rau, Thomas Glässle, Philipp Hennig, Thomas Scholten	<i>Interpretable spatial machine learning for environmental modelling</i>
Pablo Sanchez Martin, Sonja Utz, Isabel Valera	<i>Extracting expertise from tweets</i>
Lennart Schlieder, Athanasios Athanassiadis, Nikilesh Murty, Valentin Volchkov, Alexander Song, Peer Fischer, Bernhard Schölkopf	<i>Acoustic and optical diffractive networks (holography)</i>
Hassan Shahmohammadi, Hendrik P. A. Lensch, R. Harald Baayen	<i>Learning Zero-Shot Visually Grounded Word Embeddings</i>
Alessandro Simon, Martin Oettel, Georg Martius	<i>Analytic classical density functionals from an equation Learning network</i>
Manuel Traub, Sebastian Otte, Tobias Menge, Matthias Karlbauer, Jannik Thümmel, Martin V. Butz	<i>Learning What and Where - Unsupervised Disentangling Location and Identity Tracking</i>
Daniel Weber, Andreas Zell, Enkelejda Kasneci	<i>Human-robot interface with eye-tracking</i>
Stefano Woerner, Christian F. Baumgartner	<i>Strategies for Meta-Learning with Diverse Tasks</i>