



# Machine Learning meets Geosciences

## Workshop, 25 January 2023

Venue: AI Research Building, Lecture Hall (Ground Floor)  
Maria-von-Linden-Straße 6, Tübingen

13:30 – 14:00	Arrival and Lunch
<b>PANEL 1 Current Research Topics in Geosciences</b>	
14:00 – 14:15	<b>Causal Explanations for Model Interpretation in Digital Soil Mapping</b> Nafiseh Kakhani (Department of Geosciences, University of Tübingen)
14:15 – 14:30	<b>Using ML for Inversion of Mechanistic Forward Models in Geophysics</b> Reinhard Drews (Department of Geosciences, University of Tübingen)
14:30 – 14:45	<b>ISOCLIM: Exploring Isotopic Constraints on Future Climate Variability</b> Kira Rehfeld (Department of Geosciences, University of Tübingen)
14:45 – 15:00	<b>Discussion: Additional Statements from Geosciences</b>
15:00 – 15:15	Coffee Break
<b>PANEL 2 Current Research Topics in Machine Learning</b>	
15:15 – 15:30	<b>Inference with Computational Uncertainty</b> Philipp Hennig (Department of Computer Science, University of Tübingen)
15:30 – 15:45	<b>Machine Learning in Science</b> Jakob Macke (Department of Computer Science, University of Tübingen)
15:45 – 16:00	<b>Modeling SpatioTemporal Dynamics</b> Martin Butz (Department of Computer Science, University of Tübingen)
16:00 – 16:15	<b>Discussion: Additional Statements from ML</b>
16:15 – 17:00	<b>General Discussion &amp; Concluding Remarks</b>
17:00 –	Snacks and Refreshments



Please indicate your interest for participation via e-mail to [sebastian.schwenk@uni-tuebingen.de](mailto:sebastian.schwenk@uni-tuebingen.de) until Friday, 20 January 2023.

The conference is organized by Thomas Scholten and Todd Ehlers (Department of Geosciences) in collaboration with the Central Office of the Excellence Cluster ML for Science, University of Tübingen.