

Abstract Information

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Address :	Altenbergerstrasse 66c, 4040 Linz, Austria
Participation :	symposium
Title of the Symposium :	Recent advances at the interface of neuroscience and AI (NeuroAI)
Category :	Academic/Researcher
Thematic Area :	Neurosciences, robotic, and Artificial Intelligence
Title :	Explainability and Interpretability in the Neurosciences
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Abstract :	<p>In this talk, we will introduce and discuss the fundamentals of explainability in neuroscience, emphasizing how computational models process neural and behavioral data. We will explore foundational explainable artificial intelligence (XAI) techniques, such as saliency maps and SHAP values, which identify influential features, and advanced approaches like GraphLIME, GNNExplainer, and topological data analysis, tailored for graph and network structures like the connectome. By the end, participants will understand how these methods foster trust, validation, and deeper insights in neuroscience research.</p>
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