RAL/CGD SEMINAR SERIES

Explainable AI for Earth System Prediction:
From Black Box to Window into the Future

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Tuesday, March 25, 2025, 1-2 PM (MT)

HYBRID MEETING FL2-1022 I Watch Live

The coupled, complex nature of the Earth system makes it incredibly challenging to predict. Progress in this area requires integrating diverse approaches, from physics-based climate models to deep learning emulators. In this presentation, I will discuss our progress in developing and applying artificial intelligence (AI) tools to enhance Earth system prediction across time and space. These tools are designed to emulate scientific reasoning, improving intrinsic interpretability and predictive capabilities. I will demonstrate how integrating domain knowledge with AI methods and thoughtful model development can make these tools more transparent and useful to the scientists using them.
Event website