

# **Real-Time Solutions to PDEs with Neural Operators in Scientific Machine Learning**

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Recent advancements in deep learning have led to a surge in research focused on solving scientific problems under the "AI for Science." Among these efforts, Scientific Machine Learning (SciML) aims to address domain-specific data challenges and extract insights from scientific datasets through innovative methodological solutions. A particularly active area within SciML involves using neural operators to find real-time solutions to Partial Differential Equations (PDEs) as their parameters change. This presentation will discuss my latest research in this field, highlighting the significant potential of neural operators for solving complex physical phenomena.