Meta-Programming and Hybrid Parallel Strategies for Solving PDEs: An FDM and PINN Comparison

Seminar Presentation III

LI YIHAI

Mathematical Institute

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Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath

Outline

1. Introduction
2. Related Work
3. Problem Setups
4. N-Dimensional Matrix Implementation
5. Parallelization of Multi-dimensional Matrices on cartesian Topologies
6. PDE Solver Implementation
7. Experiments
8. Discussion

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Closing Remarks

Thank you for your attention!

Any questions?