Scientific Machine Learning
Final Project

Lovnesh Bhardwaj, Laurynas Varnas

$$\begin{aligned} \frac{\partial u}{\partial t} - \nabla \cdot \Sigma \nabla u + f(u) &= 0 && \text{in } \Omega \times I, \\ \mathbf{n} \cdot \nabla u &= 0 && \text{in } \partial\Omega \times I, \\ u &= u_0 && \text{in } \Omega \times \{0\}, \end{aligned}$$

References

[1] N. McGreivy and A. Hakim. Weak baselines and reporting biases lead to overoptimism in machine learning for fluid-related partial differential equations. *Nature Machine Intelligence*, 6(10):1256–1269, Sept. 2024.