

## Inverse heat transfer problems and applications

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Time-dependent problems are often modeled via parabolic differential equations. Possibly, the most prominent example for such an equation is the classical linear heat equation that describes the distribution of heat (or temperature) in a given region over time. We discuss extensions of this classical equation to nonlinear PDEs in 1D. Furthermore, we will address the associated inverse heat transfer problems and their relevance in industrial applications.

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