

The way to solve partial differential equations with PINNs

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Neural networks are increasingly used to construct numerical solution methods for partial differential equations. Physics-informed neural networks (PINNs) are a type of machine learning model that is designed to incorporate physical laws into the structure and training of a neural network. This allows the model to make predictions that are consistent with the laws of physics, making it a useful tool for problems where the underlying physical processes are known or can be approximated.

In this talk, we first introduce the concept of PINNs, and discuss the results of deep learning experiments for solving nonlinear partial differential equations.