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Machine learning of Hamiltonian dynamical systems

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n recent years, machine learning algorithms have emerged as powerful tools for modeling and understanding dynamical systems. This talk presents an overview of the recent advancements in machine learning of Hamiltonian dynamical systems. I discuss machine learning techniques that we have successfully applied to learn conservation laws for certain nonlinear lattice systems. Furthermore, we highlight the challenges and considerations in applying machine learning to dynamical systems, especially chaotic systems.

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