

清华大学高等研究院

Institute for Advanced Study, Tsinghua University

学术报告

Title: Machine Learning for Many-Body Physics

Speaker: Lei Wang

Institute of Physics, CAS

Time: 10:30am, Friday, Jan. 6, 2017

Venue: Conference Hall 322, Science Building, Tsinghua University

Abstract

Machine learning provides us a new toolset and, more importantly, a new way of thinking about many-body physics. I will first give a pedagogical introduction to machine learning, then review its recent applications in many-body physics with personal remarks. Finally, I will talk about our efforts hinge on the question: Can we make new scientific discovery and invent new efficient algorithms with it? Our answer YES, hopefully.

Refs:

[1] Lei Wang, 1606.00318

[2] Li Huang and Lei Wang, 1610.02746

[3] Li Huang, Yi-feng Yang and Lei Wang, 1612.01871