Seminar

Machine Learning for Many-Body Physics

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Time: 3:00pm, March.9, 2017 (Thursday)

时间：2017年3月9日 （周四）下午3:00

Venue: Room w563, Physics building, Peking University

地点：北京大学物理楼，西563会议室

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

About the speaker

Lei Wang received his Bachelor degree in Physics in 2006 from Nanjing University. In 2011, he received his Ph.D. degree in theoretical physics from the Institute of Physics, Chinese Academy of Sciences. He works as a postdoctoral researcher in the computational physics group of ETH Zurich from 2011 to 2016. Since 2016, he starts to work as an assistant professor in the Institute of Physics, Chinese Academy of Sciences.