物理学术报告
Physics Seminars (biweekly)

Title: **Machine learning meets quantum physics**

Speaker: **Dong-Ling Deng**
Institute for Interdisciplinary Information Sciences
Tsinghua University

Time: **4:00pm, Tuesday, April 2, 2019**

(3:30~4:00pm, Tea and Coffee)

Venue: **Conference Hall 322, Science Building, Tsinghua University**

Abstract

Recently, machine learning/artificial intelligence has attracted tremendous interest across different communities. In this talk, I will briefly introduce an emergent field of quantum machine learning/artificial intelligence---an interdisciplinary field that explores the interactions between quantum physics and machine learning/artificial intelligence. On the one hand, I will talk about several quantum algorithms that promise an exponential speed-up for machine learning tasks. On the other hand, I will show how ideas and techniques from machine learning can help solve challenging problems in the quantum domain.

Brief Bio: Dr. Dong-Ling Deng is an assistant professor at the Institute for Interdisciplinary Information Sciences, Tsinghua University. He graduated from Nankai University with two Bachelor degrees, one in physics and the other in mathematics. He then studied at the Chern Institute of Mathematics and got a master degree in theoretical physics. After that, he moved to the University of Michigan and obtained his Ph.D. in physics. He did his postdoctoral work as a JQI (Joint Quantum Institute) postdoctoral fellow at the University of Maryland. Dr. Deng's current research interest mainly concerns quantum machine learning/artificial intelligence.