Seminar

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Time: 4:00pm, March. 24, 2017 (Friday)

: 2017   3   24   4:00

Venue: Room w563, Physics building, Peking University

563

Self-learning Monte Carlo (SLMC) method is a general-purpose numerical method to simulate many-body systems. SLMC can efficiently cure the critical slowing down in both bosonic and fermionic systems. In this talk, I will give a introduction about the background, basic idea and the design principle of SLMC. Later, I will explicitly show how to use SLMC in classic systems, free fermions coupled with classical spins systems, and interacting fermion systems.

Refs:
[1] arXiv:1610.03137 (2016)
[2] arXiv:1611.09364 (2016)
[3] arXiv:1612.03804 (2016)

Xiao Yan Xu received his Bachelor degree in Physics in 2012 from Huazhong University of Science and Technology. Since 2012, he has been a doctoral student in Institute of Physics, Chinese Academy of Sciences.

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