

Yen-Chi (Sam) Chen

Computational Science Initiative

Brookhaven National Laboratory



Tuesday, March 1, 2022
12:00 PM – 1:00 PM

Register in advance for this meeting:

https://bnl.zoomgov.com/meeting/register/vJl5fuGvqTlqE2qqYVUjz_werJTINB18nvE

Host: Meifeng Lin

When reinforcement learning meets quantum computing

Abstract: Recently, reinforcement learning (RL) has demonstrated various applications with superhuman performance such as mastering the game of Go. Meanwhile, the development of quantum computing hardware shed light on building practical quantum applications to tackle previously unsolved problems. What will happen if we combine these two fascinating techniques? In this talk, I will present the recent progress in quantum RL as well as using classical RL to help certain tasks in quantum computing.

Bio: Dr. Yen-Chi (Sam) Chen received the Ph.D and B.S. degree in physics and the M.D. degree in medicine from National Taiwan University, Taipei City, Taiwan. He is now an assistant computational scientist in the Computational Science Initiative, Brookhaven National Laboratory. His research interests include combining quantum computing and machine learning. He was a recipient of the Theoretical High-Energy Physics Fellowship from the Chen Cheng Foundation, in 2014, the Theoretical Physics Fellowship from the National Taiwan University Center for Theoretical Physics, in 2015, and the First Prize In the Software Competition (Research Category) from Xanadu Quantum Technologies, in 2019.