



Department of Physics and Astronomy

Quantum Machine Learning



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Wednesday, January 20, 2021

12:00p.m.

Zoom Link

Meeting URL: <https://usc.zoom.us/j/98052669977>

Meeting ID: 980 5266 9977

Quantum machine learning investigates how quantum information processing can be used to reveal patterns in data in ways that are not accessible to classical machine learning. This talk reviews fundamental quantum machine learning protocols, and presents recent advances in quantum machine learning, including quantum generative adversarial networks, quantum inspired classical algorithms for machine learning, quantum kernel methods, and quantum neural networks. Quantum machine learning provides a provable exponential advantage over classical machine learning for a variety of problems. But will it achieve this advantage in practice? The talk will conclude with a discussion of how quantum machine learning methods could be realized using near term quantum information processing devices.



The Department of Physics and Astronomy hosts its Colloquium on Wednesday afternoons through the academic semester at 12:00pm.

See full schedule at <http://physics.usc.edu>

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