

Physics Colloquium

Prof. Eugene Demler

“New Perspectives on Quantum Matter: Bringing Together Quantum Simulations and Machine Learning”

Professor Demler will discuss the idea of combining quantum simulators with machine learning to perform inference of NMR spectra for small biological molecules. He will also discuss applications of machine learning techniques to analyze snapshots of many-body states obtained from quantum gas microscopes.

Prof. Demler received an MS degree from the Moscow Institute of Physics and Technology in 1993 and his PhD from Stanford University in Theoretical Physics in 1998. He then joined the Physics Department at Harvard. In 2015 he was successively Fellow at the Institute for Theoretical Studies at the ETH in Zurich, Switzerland, and then Distinguished Scholar at the Max Planck Institute of Quantum Optics in Germany. He has received a number of awards, including the Johannes Gutenberg lecture award in 2006 and the Siemens Research Award from the Humboldt Foundation in 2014. In 2012, he was elected Fellow of the American Physical Society.

Thursday October 8th at 4:25 via Zoom

**If you are outside the Lehigh Physics Department, please email
Marina Long (mal516@lehigh.edu) for a link.**