

## Quantum Colloquium

Wednesday, May 8, 2024, 2:00pm Jefferson 250

## **Professor Garnet Kin-Lic Chan**

California Institute of Technology

"Simulating the quantum world on a classical computer"

Dirac wrote that the laws that govern ordinary matter were known, but that the resulting equations of quantum many-particle systems were too complicated to be soluble. I will describe how, a century later, the situation has very much changed in the classical simulation of molecules and materials. I will draw on examples from our group's research in the applied physics domain, namely recent work on the simulation of the ground-states of high-temperature superconductors and the modeling of certain kinds of quantum dynamics

Guest presentation will begin promptly at 2pm.