Mathematics Department Colloquium

Organizer(s): Kenneth Ribet

Thursday, 4:10–5:00pm, 60 Evans

Apr. 2 **Inez Fung**, Professor of Atmospheric Science, UCB Department of Earth & Planetary Science

Mathematics Awareness Month Colloquium: New challenges in climate modeling

Climate models solve the equations for the conservation of momentum, mass and energy in the atmosphere and oceans, the equations of state for air and for sea water, as well as equations for energy and water exchange with the land and cryosphere. This talk reviews the mathematical basis of climate models, and presents new challenges in climate modeling. Much fundamental research is needed to improve our predictions of the timing and magnitude of climate change for the next decades. The Lorenz 1963 model of chaos will be used to explore whether we can predict abrupt climate change.