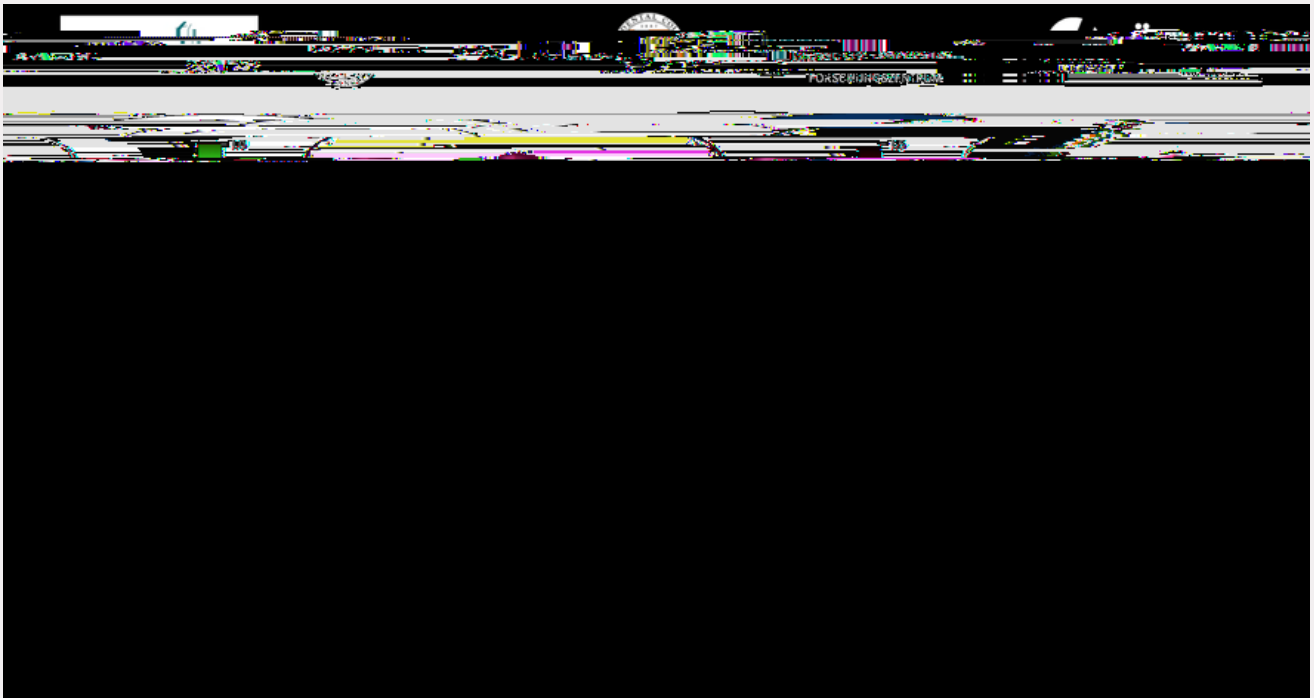


# JANET SCHEEL

Professor Scheel studies pattern formation, turbulence and chaos by performing numerical simulations of Rayleigh-Benard convection, in which a layer of fluid is heated from below and cooled from above. She is particularly interested in the transition to turbulence as well as what happens as this system becomes more and more turbulent.

Applications include better control of heat transport in nuclear reactors and liquid metal batteries as well as more natural phenomena such as solar and planetary convection.



Students interested in doing research with Professor Scheel will use Oxy's supercomputing cluster Bletchley to perform numerical simulations of Rayleigh-Benard convection and then analyze the data. No prior knowledge of fluids or computational skills are required, but a strong interest in both is essential. If you are interested, please contact [jscheel@oxy.edu](mailto:jscheel@oxy.edu).

