

# Oceanography Seminar

Andy Thompson

Professor

Environmental Science and Engineering  
California Institute of Technology

## The circulation of the Antarctic margins in a changing climate

Ocean circulation at the Antarctic margins is dominated by a system of circumpolar frontal currents that occupy the continental shelf and slope. This Antarctic Slope Front (ASF) system has a significant impact on global climate through its control over the transport of warm water towards Antarctica's floating ice shelves and over the properties of bottom waters exported from the Antarctic shelf. In the past decade, appreciation of the spatial and temporal variability of the ASF and its impact on heat and tracer transport has grown through a combination of novel in situ observational techniques, remote sensing and high resolution numerical modeling. This talk will highlight how these different approaches have improved our dynamical understanding of the ASF and its role in the global circulation and climate system.

**Thursday March 15, 2018 3:00p.m. MSB 100**