CNA 2019 Workshop on Mathematical Models For Pattern Formation

Community Talk

March 9, 2019, 8:30-9:30 pm

Giant Eagle Auditorium



Kenneth M. Golden University of Utah

Ken Golden coring Antarctic sea ice with the Australian icebreaker Aurora Australis in the background, October 2012

credit: David Lubbers

Pattern Formation in Melting Arctic Sea Ice

The precipitous loss of Arctic sea ice has outpaced expert predictions. This talk will address how sea ice is represented in climate models and how mathematics of pattern formation can improve projections of the fate of Earth's sea ice packs and the ecosystems they support. The lecture is intended for a wide, interdisciplinary audience, and will conclude with a short video on a recent Antarctic expedition where we measured sea ice properties.

Twin penguins standing watch over their sea ice, September 2007 credit: Ken Golden

Melt ponds on the surface of Arctic sea ice in August of 2005

credit: Don Perovich



Rafted pieces of Arctic sea ice consolidating into an ice floe credit: Don Perovich



