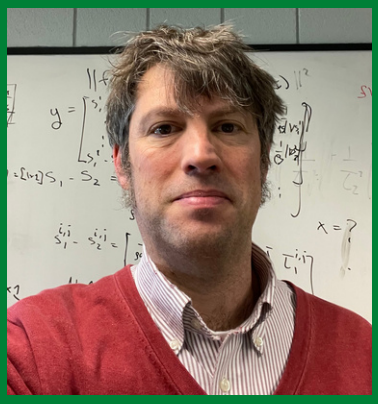
The George Liepa Sigma Xi Annual Speaker Series

Thursday, March 23rd, 2023, from 7:00-8:00pm
Student Center Auditorium - 900 Oakwood - Ypsilanti, MI
Dessert Reception Immediately Following

Dr. Jeremy Bassis



"A tale of two cities: Climate resilience and adaptation in a changing world"

As climate change accelerates, there is growing concern that our cities and communities will be subject to environmental stresses beyond what they can exceed. Sea level rise, combined with increased risk from extreme precipitation, hurricanes and other climate disasters, requires that communities urgently develop and implement adaptation plans. The challenge is that many key physical processes that control climate evolution and sea level rise remain poorly understood, leading to a range of climate and sea level rise scenarios confounding many adaptation plans. At the same time, communities face disparate vulnerabilities with lower income and marginalized communities already facing disproportionate risks associated with flooding with fewer resources to mitigate these disasters. Addressing these risks requires that we link science, society and engineering to understand how the past can inform equitable adaptation and mitigation policies that are urgently needed. I will talk about how the history, geography and geology affect past and future adaptation efforts with a focus on adaptation and mitigation efforts currently underway in the nearby midwestern city of Detroit, Michigan and the coastal city of Houston, Texas.

About Dr. Bassis: "I did my undergraduate degree in Math and Physics. I did my PhD at the Scripps Institution of Oceanography, where I was trained as a geophysicist and oceanographer. I then moved to the University of Chicago, driving from La Jolla California to Chicago in December. I am now a professor in the Department of Climate and Space Sciences at the University of Michigan. Most of my original work uses a mixture of computational work, field work and satellite imagery to understand the fundamental processes and mechanisms by which ice sheets and glaciers respond to climate change. Increasingly, my work has evolved to focus more on interdisciplinary approaches that integrate science into decision making to adapt to the changing climate."