



## Climate Program Opening Workshop August 21-25, 2017

**Lecture:** *Ice Sheet Contribution to Sea Level Rise*

**Speaker:** Charles Jackson

**Abstract:**

This problem represents an interesting opportunity for scientists and statisticians to collaborate since the problem is too big for either community. The science is not well established, although fairly sophisticated ice flow models exist. They are even becoming relevant to explain some of the complexity seen in observational data. At the same time, the complex phenomena we see in observations may not be particularly relevant to assessing the risks of significant increases in sea level rise over the near future. The talk will review what we have learned about this problem through the PISCEES SciDAC project. This problem is rich with challenges and opportunities, particularly for realigning how our two communities engage each other. The talk will review the computational, scientific, and mathematical "reality checks" that might stop any reasonable person from considering this topic further. I then will point out how each of these challenges could be mitigated if these different perspectives were better integrated.