

# CCC Workshop on Uncertainty in Computation: Why are we all here?

# Why are we here?

---

- Dramatic increases in *ability* of computational science to provide information about uncertainty
- Dramatic increase in *need* to make decisions about phenomena involving uncertainty
  - Science, engineering, public policy, ...
- Is it time to significantly expand the scope of research on uncertainty in computation?
  - Looking forward to create a research agenda, not looking back at research accomplishments

# Intellectual goal

---

- Different communities coming together to explore common perspectives on a complex problem
  - Can we articulate a common national need for more attention being paid to uncertainty?
  - Can we identify emergent properties of uncertainty that span some or all of the disciplines represented at the workshop?
  - Do these emergent properties merit a coordinated research effort of substantial magnitude?

# Practical goal

---

- Influence how policy makers and funding agencies think about the problem of uncertainty
  - Conversations among ourselves and with others in a position to make a difference
  - Final workshop report and additional whitepapers that articulate the need for action
    - Need volunteers to help write these and follow up with appropriate individuals and agencies.

# Overview of workshop activities

---

- This morning – establishing the scope:
  - Short introductory talks giving overviews of the disciplines represented
  - Time for questions and comments
- This afternoon – furthering discussion:
  - Three panels: cross-discipline issues, Grand Challenges, is this really the time?
- Tomorrow morning – a plan for action:
  - Two sets of breakout sessions, all exploring questions relevant to final report

# Uncertainty in Computation

## NON SEQUITUR

