



# THE UNIVERSITY OF CHICAGO

## COMPUTATIONAL AND APPLIED MATHEMATICS COLLOQUIUM

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Issues in Data Assimilation for Ocean and Sea-ice Models

THURSDAY, January 11, 2018, at 5:00 PM

Jones 226, 5747 South Ellis Avenue

### ABSTRACT

Assimilating observational data into physically based models is both an important scientific issue and a challenging mathematical and statistical problem. At its core lies the familiar tension between nonlinearity and dimension. Most approaches have been developed to work in general and thus ignore the potential advantages presented by the structure of a particular physical situation. I will advocate for methods that are tailored to the specific problems arising in studies of the ocean. The primary focus will be on the assimilation of Lagrangian data coming from observing instruments that move with the flow. I will also discuss recent work on data assimilation in next generation sea-ice models.

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#### Organizers:

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CAM Colloquium URL: <https://cam.uchicago.edu/seminars/index.shtml>.

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