

Seminaire  
Mercredi 09 Juillet 2014, 11h00  
salle LLL, LGGE

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**Data assimilation in sea ice modeling: how can we constrain, initialize and improve sea ice models at high latitudes?**

The polar regions are excellent testbeds for data assimilation in geophysical systems. At high latitudes, observations are sparse and incomplete; climate models simulate the whole ocean and sea ice states at high spatial and temporal frequency, but exhibit systematic biases. How to optimally blend these two complementary sources of information remains an active, and open domain of research. During this seminar, I will give three practical applications of data assimilation in the framework of large-scale ocean--sea ice modeling: sea ice thickness reconstruction, initialization of seasonal predictions and model parameters estimation. I will also discuss the key aspects and the importance of underlying hypotheses in data assimilation using a simple sea ice model. All welcome!