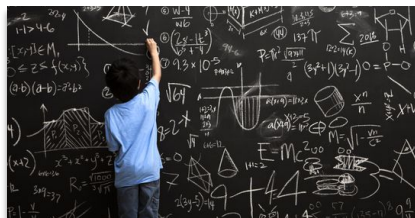
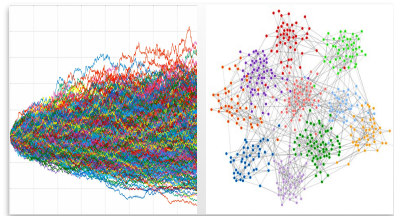


## Mathematical methods



Analysis methods for novel sea ice models

## Parameterized models



Stochastic and Machine Learning sea ice models

## Sea ice floe model



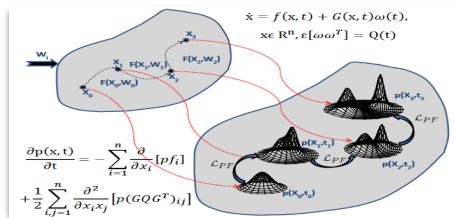
Improved sea ice modeling at floe scales

## Data analysis



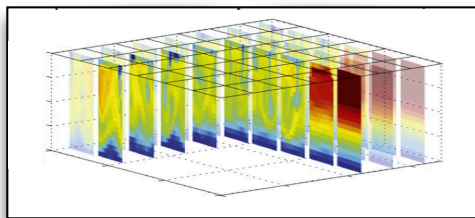
High-resolution remote sensing and *in-situ* data analysis

## Data assimilation and UQ



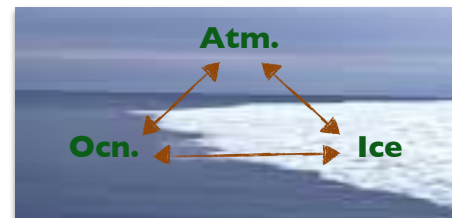
Quantifying model errors and uncertainty in parameter estimates

## Superparameterization



Computationally-efficient and accurate sea ice modeling

## Sea ice coupling



Sea ice predictability in coupled atmosphere-ice-ocean models