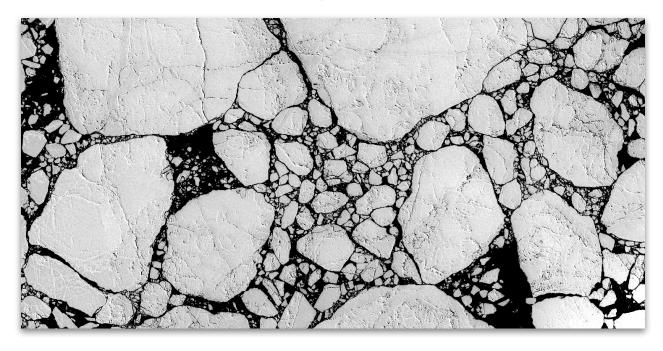
## Modeling the Discrete Nature of Sea Ice

Online Workshop: June 7-10, 2021



What is it about? The multi-scale nature of sea ice presents a challenge for developing realistic models capable of simulating individual floes and fractures. Recent advances in high performance computing present unique opportunities for exploration of the multi-scale dynamics using discrete element or granular media models. However, such models present many challenges associated with the development and validation of the interaction rules between the elements. This workshop is aimed to provide the numerous research groups an opportunity to come together and discuss the various philosophical approaches taken to modeling the discrete nature of sea ice, showcase the existing model capabilities, identify major obstacles in the development of model physics, and outline a coherent set of experiments for model inter-comparison and validation against observations.

**Workshop format.** At least 2 weeks before the workshop, attendees will submit the title/abstract for their talks/posters, upload their presentation slides and a pre-recorded video about 20-30 minutes long. All presentations will be publicly available to be viewed by the participants before the online workshop. Discussion sessions during the online workshop will be aimed at exchanging ideas and at improving our understanding of physical processes and multi-scale modeling capabilities. All materials will be made publicly available after the conference.