

Quantifying the Distribution of Soil and Permafrost Properties and Their Linkage with Landscape Properties in Arctic Tundra Ecosystem



Dr. Baptiste Dafflon

Lawrence Berkeley National Laboratory, U.S.A.

Improving understanding of arctic ecosystem functioning and parameterization of process-rich models that simulate feedbacks to a changing climate require advances in estimating the spatial and temporal variations in land surface, active layer, ice-wedge and permafrost properties. In the context of the Next-Generation Ecosystem Experiments (NGEE-Arctic), we are developing advanced geophysical strategies to improve characterization and monitoring of Arctic ecosystems. To meet this objective, we have developed new geophysical inversion and interpretation approaches using a variety of acquisition strategies, including point measurements, ground-based measurements, and aerial platforms – some collected autonomously. Together, the geophysics-based acquisition and inversion approaches are providing unique high-resolution information and new insights about the Arctic ecosystem functioning as well as providing information to models – at scales and resolutions useful for predicting terrestrial ecosystem feedbacks to the climate.

17 June 2016



11:30 a.m.



**Conference Room, 3/F,
Mong Man Wai Building**



Enquires: 3943 9624 essc@cuhk.edu.hk