WAIS Workshop 2020 Agenda

Virtual Science Sessions

Session 1: Science Communication & Outreach	**Presenter**
The (Science) Hero's Journey – Using Storytelling in Science Outreach [video]	Marlo Garnsworth
Sharing science through _____ : Lessons learned from 2 years of cryotoon-ing [video]	Kiya Riverman
Thwaites Glacier and Ice-Ocean Interaction at the Grounding Line #scicomm #STEAM [video]	Indrani Das
A Science Comic Artist Went Into Antarctica: What Came Out? [video]	Karen Romano Young
An Antarctican's Adventures in Social Media [video]	Peter Neff
Discussion [video]	All

Session 2: The Leading Edge	**Presenter**
ICESat-2 Update and Application to WAIS [video]	Tom Neumann
Automatic Extraction of Features from Antarctic Imagery [video]	Mike Willis
Glacial Acceleration, Rifting, Calving, and Melt Processes and Their Measurement Using ICESat-2 [video]	Ute C. Herzfeld
Geostatistical Simulations of Subglacial Topography: Implications for Water Routing at Jakobshavn Glacier [video]	Mickey MacKie
A new technique for measuring the depths of surface melt features on ice sheets from ICESat-2 [video]	Philipp Arndt
Re-evaluating the elastic response to ice mass change in Antarctica [video]	William Durkin
Characterizing Contemporary solid-Earth Feedbacks in West Antarctica Using High-Resolution Mass Load Changes [video]	Jasmine Hansen
Discussion [video]	All

Session 3: Past Records of Changes and Processes 1	**Presenter**
Can dust transport to peripheral EAIS inform us on WAIS extent? [video]	Sarah Aarons
Behavior of Grounded Ice in McMurdo Sound during Termination I [video]	Brenda Hall
Evidence for a Marine West Antarctic Ice Sheet in the Early Miocene [video]	Jim Marschalek
Bed roughness impact on streaming ice-flow persistence [video]	Santiago Munevar
South Pole Ice Core (SPICEcore) Dust Record of South Westerly Wind Variability During Dansgaard-Oeschger Events [video]	Erich Osterberg
Sedimentary signature of past West Antarctic Ice Sheet and ocean dynamics from cores drilled in the Amundsen Sea (IODP Expedition 379) [video]	Delaney Robinson
Marine sedimentary records of Holocene changes of Thwaites Glacier's margin, Amundsen Sea, West Antarctica [video]	Rachel Clark
Discussion [video]	All

Session 4: Past Records of Changes and Processes 2	Presenter
Asynchronous behavior of local glaciers and grounded Ross Sea ice in the Royal Society Range, Antarctica, during the Last Glacial Maximum and deglaciation [video]	Maraina Miles
Variable response of Transantarctic outlet glaciers to grounding-line retreat during the last deglaciation [video]	Trevor Hillebrand
Investigating the History of Ice Dynamics at the Intersection of the West and East Antarctic Ice Sheets – A Progress Report on Geophysical Surveys at Hercules Dome [video]	Knut Christianson
Ice-free valleys in the Neptune Range of the Pensacola Mountains, Antarctica: Glacial geomorphology, geochronology, and potential as palaeo-environmental archives [video]	David Small
Towards a Complete Picture of Holocene Ice Surface Changes at Thwaites Glacier using Subglacial Bedrock Exposure Dating [video]	Brent Goehring
Persistent Meltwater Discharge from Thwaites Glacier Recorded in Offshore Sediments [video]	Alie Lepp
Discussion [video]	All

Session 5: Grounding Zones & Ice Shelves 1	Presenter
Improving basal melt rate estimates near ice-shelf grounding zones [video]	Susheel Adusumilli
Annual Area Changes of Antarctic Ice Shelves from 2009 to 2019 [video]	Julia Andreasen
Firn structure and its variability across Larsen C Ice Shelf, Antarctic Peninsula, from Multimodal Layered Transdimensional Inversion (MuLTI) of seismic dispersion curves and borehole density logs [video]	Bernd Kulessa
Modeling Ross Ice Shelf Sensitivity to Changes Along its Western Lateral Margin using the Ice Sheet System Model (ISSM) [video]	Lynn Kaluzienski
Constraints on Geothermal Flux from coastal domes in West Antarctica [video]	Elizabeth Urban
The remains of lost pinning points [video]	Robert Larter
Tidally forced bending of the Thwaites Glacier grounding zone: Implications for seawater pumping and grounding zone stability [video]	Kiya Riverman
Discussion [video]	All

Session 6: Grounding Zones & Ice Shelves 2	Presenter
Marine ice cliff instability is not (always) an instability [video]	Jeremy Bassis
Breaking Better: rifts in ice shelf models [video]	Martin Forbes
Glacial landforms as archives of grounding line processes and retreat [video]	Lauren Simkins
Variable sub-ice shelf melt channel morphology and evolution in West Antarctic ice shelves [video]	Allison Chartrand
Seafloor depth of George VI Sound, Antarctic Peninsula, from inversion of aerogravity data [video]	Renata Constantino
Discussion [video]	All

Session 7: Grounding Zones & Ice Shelves 3	Presenter
Recent changes on the Thwaites Eastern Ice Shelf [video]	Christian Wild
The role of history and strength of the oceanic forcing in sea level projections from Antarctica with the Parallel Ice Sheet Model [video]	Ronja Reese
Recent atmospheric anomalies reduce threat of warm water to World's largest ice shelf [video]	Tore Hattermann
Terrestrial origin for accreted basal ice in Ross Ice Shelf flow bands [video]	Christina Hulbe
Illusory Stability of Marine-Terminating Glaciers at Bed Peaks [video]	Alexander Robel
Recent changes on the Thwaites Eastern Ice Shelf [video]	Erin Pettit
Sensitivity of Coupled Solid Earth – Ice Sheet Modeling of Thwaites Glacier to Coupling Timescale and Earth Rheology [video]	Matthew Hoffman
Discussion [video]	All

Session 8.1: Subglacial Environments & Processes 1	Presenter
Imaging salty groundwater in sedimentary basins beneath Whillans Ice Plain, West Antarctica [video]	Chloe Gustafson
Subglacial lakes and hydrology across the Ellsworth Subglacial Highlands, West Antarctica [video]	Felipe Napoleoni
Basal Ice Stratigraphy from Mercer Ice Stream, West Antarctica: Implications for sub ice stream accretionary processes [video]	Tim Campbell
Subglacial sediment flux in response to basal slip [video]	Dougal Hansen
Ice streams: thermal pattern formation in ice sheets [video]	Christian Schoof
Discussion [video]	All

Session 8.2: Subglacial Environments & Processes 2	Presenter
Inferring and quantifying shear margin ice fabric anisotropy from radar sounding [video]	T.J. Young
Assessing the potential for basal thermal regime change to accelerate mass loss from the Antarctic Ice Sheet [video]	Eliza Dawson
Interior ice-sheet dynamics are constrained through the Holocene transition using the thermodynamics of South Pole Lake [video]	Ben Hills
Investigating Mechanisms of Basal Strength at Thwaites Glacier using a Forward Model Approach [video]	Paul Summers
Relevance of Topographic Roughness Amplitude, Orientation, and Spatial Frequency for Basal Resistance Inversions: A Case Study on Thwaites Glacier, Antarctica. [video]	Andrew Hoffman
Discussion [video]	All

Session 9: Oceanography and Marine Biology	Presenter
The Antarctic Coastal Current across West Antarctica [video]	Andrew Thompson
Ice-shelf ocean interactions of West Antarctic and East Antarctic ice shelves [video]	Yoshi Nakayama
Sensitivity to changes in the winds of cryosphere contributions to micronutrient supply to the surface waters around Antarctica [video]	Mike Dinniman
Seasonal and interannual variability of the Antarctic Coastal Current in the eastern Amundsen Sea [video]	Tasha Snow
Discussion [video]	All

Session 10: Snow, Firn, and Surface Mass Balance	**Presenter**
Recent relative sea-level history for the Pine Island Bay region, West Antarctica [video]	Scott Braddock
A 3-D Model of Antarctic Ice Shelf Surface Hydrology [video]	Sammie Buzzard
Quantifying Uncertainty in a 16-Year Time Series of Larsen C Ice Shelf Thickness from Airborne Radar Sounding [video]	Riley Culberg
Combining AMSR-2 observations with a radiative transfer model to derive surface properties of the Larsen C [video]	Marissa Dattler
Investigating the magnitude of snow redistribution over the Antarctic Ice Sheet using ICESat-2, IceBridge, and atmospheric reanalysis data [video]	Brooke Medley
Observations and Impact of Atmospheric River-Driven Extreme Precipitation over Thwaites Glacier [video]	Michelle Maclennan
Discussion [video]	All