WAIS 2017 Agenda

(as of 10/5/17, subject to change)

Held at Camp Casey Conference Center in Coupeville, Washington, U.S.A.

Sunday, October 8

Time	Topic	
4:00pm to 8:00pm	Registration: pick up badges	Dining Tent (Ft. Casey Inn)
4:00pm to 7:00pm	**Poster set up**	Dining Tent
4:30 to 6:30pm	**Return of the Jedi:** **WAIS Science Steering Group Meeting**	Garrison Hall (Ft. Casey Inn)
6:30 to 9:00	Informal pizza & salad dinner / icebreaker Please bring cash to contribute to the food and drink **Monday Presenters - upload talks (7p-9p) with UW student**	Dining Tent

Monday, October 9

Time	Topic	
7:30-8:15am	Breakfast	Mess Hall A (Camp Casey)
8:15 to 8:25	Pick up badges	Auditorium A
8:30am to 9:00	**Welcome and logistics** **Foundation and Empire:** **Remarks from NSF and NASA**	T. Scambos et al.
Session 1	**The Time Machine: WAIS Workshop history and descendants**	
9:00 to 10:15 5 talks (15 min)	The ABC's of WAIS [Abstract]	Bindschadler 395
	Geologic Controls and Ongoing	Winberry

	Evolution of the Crary Ice Rise [Abstract]	370
	GPS-derived estimates of surface mass balance and ocean-induced basal melt for Pine Island Glacier ice shelf, Antarctica [Abstract]	Shean 357
	Six years of variable height-changes of Siple Coast ice streams from CryoSat-2 altimetry [Abstract]	Siegfried 390
	The shape of change: using spatial statistics identify sources of change on the Ross Ice Shelf [Abstract]	Hulbe 407
10:15 to 10:30	Open discussion	
10:30 to 10:45	Coffee break	
Session 2	**A Scanner Darkly: Radar + Ice Sheets**	
10:45 to 12:00 5 talks (15 min)	The grounding and formation of Crary Ice Rise [Abstract]	Conway 375
	Record of the ice sheet interior response to Siple Coast Ice Stream variability from glacial stratigraphy [Abstract]	Holschuh 361
	Internal stratigraphy and age structure of the Allan Hills Blue Ice Area, East Antarctica [Abstract]	Kehrl 356
	Internal layer deformation reveals past ice flow over the central sticky spot of Whillans Ice Stream, West Antarctica [Abstract]	Elsworth 350
	Observing the Temporal Evolution of Subglacial Conditions Using Radar Sounding Data [Abstract]	Schroeder 326
12:00 to 12:15	Open discussion	

12:15 to 1:30	Lunch	Mess Hall A
Session 3	**The Farthest Shore:** **Thwaites Glacier and Adjacent Ocean**	
1:30 to 3:00 6 talks (15 min)	Subglacial controls on the stability of Thwaites Glacier: 1. Geophysical data [Abstract]	Anandakrishnan 342
	Subglacial controls on the stability of Thwaites Glacier: 2. Physical understanding and modeling [Abstract]	Alley 351
	Subglacial controls on the stability of Thwaites Glacier: 3. A varied subglacial landscape [Abstract]	Christianson 400
	Subglacial hydrology of Thwaites Glacier revealed by connected lake drainage [Abstract]	B. Smith 399
	Influence of West Antarctic topography on ocean circulation: a positive feedback [Abstract]	Steig 341
	"Meltwater pump" mechanism directly links the extreme Amundsen Sea phytoplankton bloom to the melting ice shelf [Abstract]	Yager 349
3:00 to 3:15	Open discussion	
3:15 to 3:30	Coffee	
3:30 to 3:45	**Cryptonomicon:** **WAIS NSF Data Management: IEDA**	Steve Richard
3:45 to 5:30	**Contact: Posters** 15x1min poster introductions Poster session to follow in Tent	Barcheck through Meyer
5:30 to 6:30	Break	
6:30	Dinner	Tent

Tuesday, October 10

7:30am to 8:30 am	Breakfast	Mess Hall A
8:30	Arrive	
Session 4	**On the Beach: Ice Shelves**	
8:30 to 10:15 7 talks (15 min)	Understanding Ice Shelf Basal Melting Using Convergent ICEPOD Data Sets: ROSETTA -Ice Study of Ross Ice Shelf [Abstract]	Bell 343
	Decadal variability of ice shelf melting forces ice sheet retreat in West Antarctica [Abstract]	Dutrieux 339
	Quantifying Multidecadal Average Basal Mass Balance of the Ross Ice Shelf, Antarctic [Abstract]	Das 378
	Contrasting causes of decadal-scale variability of ice shelf height changes across the Antarctic Peninsula [Abstract]	Adusumilli 352
	CryoSat-2 Derived Ice Shelf Thickness and Implications for Mass Balance in West Antarctica [Abstract]	Chuter 394
	Elevated melt causes varied response of Crosson and Dotson Ice Shelves [Abstract]	Lilien 335
	Ocean forcing of Holocene ice-sheet retreat in Pine Island Bay [Abstract]	Hillenbrand 392
10:15 to 10:30	Open discussion	
10:30 to 10:45	Coffee break	
Session 5	**I, Robot: New Data and New Methods**	
10:45 to 12:00 5 talks (15 min)	A preview of ICESat-2 land-ice products over WAIS: A torrent of data, and a tea cup from which to sip it	B. Smith 380

	[Abstract]	
	Detection and characteristics of icebergs in the Amundsen Sea [Abstract]	Mazur 366
	Measuring Ocean Variability near Ice Shelves with Autonomous Profiling Floats [Abstract]	Porter 377
	West Antarctic Ice Sheet History from a Subglacial Bedrock Core [Abstract]	Stone 396
	Powering Science at High Latitudes - UNAVCO [Abstract]	Pettit 381
12:00 to 12:15	Open discussion	
12:15 to 1:30	Lunch	Mess Hall A
Session 6	**Ender's Game: Models of Ice and Processes**	
1:30 to 3:00 6 talks (15 min)	Controls on the Thickness of Freeze-On Units Beneath Ice Sheets [Abstract]	Wolovick 346
	Hmax, the maximum ice sheet Height [Abstract]	Lipovsky 336
	Our model incorporates a multistable hydrology that includes "fast" and "slow" behaviors [Abstract]	Creyts 358
	Damage Mechanics Approach to Modeling Crevasse Propagation and Iceberg Calving [Abstract]	Duddu 362
	Towards a Universal Calving Law: Modeling Ice Shelves Using Damage Mechanics [Abstract]	Whitcomb 338
	What If Paris Works: Ice Sheet Surface Melting in Warm (1.5 °C) and Warmer (RCP 8.5) Worlds [Abstract]	Reusch 393

3:00 to 3:15	Open discussion	
3:15 to 3:30	Coffee	
3:30 to 5:30	**Contact: Posters** 15x1min Poster Introductions Poster session to follow in Tent	Neff through Wolovick
6:30	Dinner	Dining Tent

Wednesday, October 11

7:30 to 8:30	Breakfast	Mess Hall A
8:30	Arrive	Auditorium A
Session 7	**Speaker for the Dead: Geo, Paleo, and some Cryo**	
8:30 to 10:15 7 talks (15 min + 1 min transition)	Using sub-ice-shelf sediments to reconstruct glacial history [Abstract]	J. Smith 405
	Subglacial structure of the Whillans Ice Stream from inversion of Rayleigh wave velocities and H/V ratios [Abstract]	Wiens 367
	Historical surface elevations of Transantarctic Mountain outlet glaciers derived from Structure-from-Motion processing of trimetrogon aerial imagery [Abstract]	Child 398
	Thermal structure of the Antarctic lithosphere constrained by seismic data [Abstract]	Shen 372
	Geology and Crustal Structure Underlying Ross Ice Shelf: New Perspectives from ROSETTA-Ice Project airborne investigations [Abstract]	Siddoway 391
	The Reference Elevation Model of Antarctica (REMA): A High Resolution, Time-Stamped Digital Elevation Model	Morin 373

	for the Antarctic Ice Sheet [Abstract]	
	Hercules Dome: A deep ice core site for inferring past stability of the West Antarctic ice sheet [Abstract]	Fudge 364
10:15 to 10:30	Open discussion	
10:30 to 10:45	Coffee break	
Session 8	**The Abyss: Polar Oceans**	
10:45 to 12:00 5 talks (15 min)	Tides on Antarctic Ice Shelves from Cryosat-2 Radar Altimetry [Abstract]	Padman 334
	Ocean stratification reduces melt rates at the grounding zone of the Ross Ice Shelf [Abstract]	Begeman 328
	How well do we resolve eddies in regional ocean models? [Abstract]	Mack 344
	On the evolution of the Filchner-Ronne Ice Shelf cavity in the Weddell Sea, Antarctica [Abstract]	Mueller 376
	The Seasonal Cycle of the Upper Ocean near the Ross Ice Shelf Front from Autonomous Profiling Floats and Models [Abstract]	Springer 363
12:00 to 12:15	Open discussion	
12:15 to 12:20	Wrap up	
12:20 to 1:30	Lunch - sack lunch	Mess Hall A
1:30 to 3:30	**Journey to the Center of the Earth:** Geology Field Trip Glacial Geology of Whidbey Island area **(weather permitting)**	Out and About - beach on Puget Sound

Contact: WAIS Posters -- 3:30 to 5:30 Monday and Tuesday

Patterned ice stream basal micro-seismicity reveals bedforms [Abstract]	Barcheck 331
Ross Ice Shelf Structure and Thickness from High-Resolution Airborne Laser Altimetry [Abstract]	Becker 354
Pre-and post-LGM ice thickness changes in the western Ross Sea derived from cosmogenic C-14 concentrations in bedrock [Abstract]	Goehring 332
Optical dating of past ice-free conditions in West Antarctica [Abstract]	Gombiner 397
Fire and Ice: A New Volcanic Province Under West Antarctica [Abstract]	Hein 402
Holocene grounding-line retreat and deglaciation of Darwin and Hatherton Glaciers, Antarctica [Abstract]	Hillebrand 379
Feedbacks between subglacial drainage and ice thickness evolution in a coupled ice sheet model: Effect on the marine ice sheet instability [Abstract]	Hills 337
Modeling the kinematic effect of horizontal strain rates on firn depth-density profiles [Abstract]	Horlings 348
Is the Ross Ice Shelf nailed to the Transantarctic Mountains? [Abstract]	Hughes 406
Glacial-geomorphological evidence for post-LGM thinning of Pope Glacier, western Amundsen Sea Embayment [Abstract]	J. Johnson 333
The iSTAR GIS for Pine Island Glacier: A growing resource for West Antarctic Ice Sheet research [Abstract]	J. Johnson 353
Use of Shallow Ice Radar Reflections of Kamb Ice Stream within the Ross Ice Shelf to Evaluate Thickness Change due to Basal Processes [Abstract]	Jozef 384
Shallow Ice Radar Expression of TAM glaciers within Ross Ice Shelf, and a New Method to Distinguish Mechanisms of Ice Sheet Thinning	Keeshin 382

[Abstract]	
Ice stream tidal modulation and stick-slip, a unified description [Abstract]	Lipovsky 359
Development of temperate ice and transitions in subglacial hydrology along ice stream shear margins [Abstract]	Meyer 327
The Role of Ice Cores in Constraining Future Thwaites Glacier Evolution [Abstract]	Neff 388
Temperature profiles along the Whillans Ice Stream measured using a Distributed Temperature Sensor [Abstract]	Neuhaus 365
Post-Last Glacial Maximum Thinning History of the Foundation Ice Stream, Adjacent to the Pensacola Mountains [Abstract]	Nichols 340
New Antarctic Peninsula Bathymetry Derived from NASA IceBridge Gravity Anomalies [Abstract]	Porter 387
Wet subglacial landforms in ice stream shear margins [Abstract]	Riverman 389
Pre-1990 Evolution of the Larsen Ice Shelves [Abstract]	Scambos 401
icepack: glacier flow model in python [Abstract]	Shapero 360
CDW25k: Assessing the role of oceanic forcing of West Antarctic Ice Sheet retreat since the LGM [Abstract]	J. Smith 404
Model-predicted firn-property changes in West Antarctica using the Community Firn Mode [Abstract]	Stevens 355
Bathymetry of the Ross Ice Shelf from ROSETTA-Ice integrated Surveys [Abstract]	Tinto 383
Preserved Crevasse Casts in the Whales Deep Basin, Ross Sea [Abstract]	Tulaczyk 385
Direct observations of fast ice dynamics and high strain rates at Helheim Glacier, East Greenland [Abstract]	Vankova 347

Initial Analysis of High-Resolution Digitized Radar Sounding Data Recovered from the SPRI/NSF/TUD Film Archive of Antarctic Ice Sheet [Abstract]	Vega 330
Geoengineering Marine Ice Sheets [Abstract]	Wolovick 345