

Dustin M. Schroeder

Assistant Professor of Geophysics

Department of Geophysics, School of Earth, Energy, and Environmental Sciences
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EDUCATION

- 2014 Jackson School of Geosciences, University of Texas, Austin, TX
Doctor of Philosophy (Ph.D.) in Geophysics
- 2007 Bucknell University, Lewisburg, PA
Bachelor of Science in Electrical Engineering (B.S.E.E.), departmental honors, magna cum laude
Bachelor of Arts (B.A.) in Physics, magna cum laude, minors in Mathematics and Philosophy

PROFESSIONAL EXPERIENCE

- 2016 – present Assistant Professor of Geophysics, Stanford University
- 2017 – present Assistant Professor (by courtesy) of Electrical Engineering, Stanford University
- 2020 – present Center Fellow (by courtesy), Stanford Woods Institute for the Environment
- 2016 – 2020 Faculty Affiliate, Stanford Woods Institute for the Environment
- 2014 – 2016 Radar Systems Engineer, Jet Propulsion Laboratory, California Institute of Technology
- 2012 Graduate Researcher, Applied Physics Laboratory, Johns Hopkins University
- 2008 – 2014 Graduate Researcher, University of Texas Institute for Geophysics
- 2007 – 2008 Platform Hardware Engineer, Freescale Semiconductor

AWARDS

- 2019 Senior Member, Institute of Electrical and Electronics Engineers
- 2018 CAREER Award, National Science Foundation
- 2018 LInC Fellow, Woods Institute, Stanford University
- 2016 Frederick E. Terman Fellow, Stanford University
- 2015 JPL Team Award, Europa Mission Instrument Proposal
- 2014 Best Graduate Student Paper, Jackson School of Geosciences
- 2014 National Science Olympiad Heart of Gold Award for Service to Science Education
- 2013 Best Ph.D. Student Speaker, Jackson School of Geosciences
- 2013 Jackson School of Geosciences Research Symposium, 1st Place Late-Career Ph.D.
- 2012 NASA Group Achievement Award: Operation Ice Bridge
- 2012 Gale White Fellowship, University of Texas Institute for Geophysics
- 2012 David Brunton Jr. Fellowship, University of Texas Graduate School
- 2011 National Science Foundation Antarctic Service Medal
- 2010 The Friar Society, The University of Texas
- 2009 NSF Graduate Research Fellowship
- 2008 University of Texas Graduate School Recruiting Fellowship
- 2007 Thelma Johnson Showalter Prize, Bucknell University
- 2007 Phi Beta Kappa, Bucknell University
- 2006 Tau Beta Pi, Bucknell University
- 2006 Sigma Pi Sigma, Bucknell University

PUBLICATIONS

Journal Articles (* indicates student or postdoctoral advisee, 2nd author is typically senior author)

- in review* E.M. MacKie*, D.M. Schroeder, C. Zou, Z. Yin, J. Caers, Stochastic Modeling of Subglacial Topography: Implications for Water Routing at Jakobshavn Glacier
- in review* S.T. Peters*, D.M. Schroeder, W. Chu*, D. Castelletti*, M.S. Haynes, A. Romero-Wolf, Glaciological Monitoring Using the Sun as a Radio Source for Echo Detection
- in review* D. Castelletti*, D.M. Schroeder, T.M. Jordan*, D.A. Young, Permanent Scatterers in Repeat-pass Airborne VHF Radar Sounder for Layer Velocity Estimation
- in review* G. Steinbrügge*, J.R.C. Voigt, N.S. Wolfenbarger, C.W. Hamilton, K.M. Soderlund, D.A. Young, D.D. Blankenship, S. Vance, D.M. Schroeder, Brine Pocket Migration on Europa and its Application to Manannán Crater
- in review* A. Hilger*, D.M. Schroeder, W. Chu*, R. Culberg*, T.M. Jordan*, H. Seroussi, D.A. Young, D.G. Vaughan, Multi-System Synthesis of Radar Sounding Observations of the Amundsen Sea Sector from the 2004-2005 Field Season
- in review* D. Castelletti*, D.M. Schroeder, G. Steinbrügge*, S. Turner, R. Jensen, G.W. Paterson, Polarimetric Bistatic Synthetic Aperture Radar Observations of the Moon using Mini-RF
- in review* L. Carrer*, D.M. Schroeder, A. Romero-Wolf, L. Bruzzone, Analysis of Temporal and Structural Characteristics of Jovian Radio Emissions for Passive Radar Sounding of Jupiter's Icy Moons
- in press* R. Delf*, D.M. Schroeder, R.G. Bingham, A. Curtis, A. Giannopoulos, A comparison of automated approaches to extracting englacial-layer geometry across ice sheets, *Annals of Glaciology*
- 2020 O. Bartlett*, S.J. Palmer, D.M. Schroeder, E.J. MacKie*, T.T. Barrows, S.L. Cornford, A.G.C. Graham, Geospatial simulations of airborne ice-penetrating radar surveying reveal elevation under-measurement bias for ice sheet bed topography, *Annals of Glaciology*, doi.org/10.1017/aog.2020.35
- 2020 M. Goldberg*, D.M. Schroeder, D. Castelletti*, E. Mantelli*, N. Ross, M.J. Siegert, Automated detection and characterization of Antarctic basal units using radar sounding data: demonstration in Institute Ice Stream, West Antarctica, *Annals of Glaciology*, doi.org/10.1017/aog.2020.27
- 2020 I.M. Shoemaker, A. Kusenko, P.K. Munneke, A. Romero-Wolf, D.M. Schroeder, M.J. Siegert, Reflections on the Anomalous ANITA Events: The Antarctic Subsurface as a Possible Explanation, *Annals of Glaciology*, doi.org/10.1017/aog.2020.19
- 2020 S.T. Peters*, D.M. Schroeder, A. Romero-Wolf, Passive Radio Sounding to Correct for Europa's Ionospheric Distortion of VHF Signals, *Planetary and Space Science*, doi.org/10.1016/j.pss.2020.104925
- 2020 R. Culberg*, D.M. Schroeder, Near-Surface Clutter Constraints on Orbital Radar Sounder Design and Performance, *IEEE Transactions on Geoscience and Remote Sensing*, doi.org/10.1109/TGRS.2020.2976666
- 2020 E. J. MacKie*, D. M. Schroeder, J. Caers, M. R. Siegfried*, C. Scheidt, Antarctic Topographic Realizations and Geostatistical Modeling Used to Map Subglacial Lakes, *Journal of Geophysical Research*, doi.org/10.1029/2019JF005420
- 2020 D.M. Schroeder, R.G. Bingham, D.D. Blankenship, K. Christianson, O. Eisen, G.E. Flowers, N.B. Karlsson, M.R. Koutnick, J.D. Paden, M.J. Siegert, Five Decades of Radioglaciology, *Annals of Glaciology*, doi.org/10.1017/aog.2020.11
- 2020 T.M. Jordan*, D.M. Schroeder, C.W. Elsworth*, J. Dall, M.R. Siegfried*, Estimation of Ice Fabric within the Whillans Ice Stream Using Polarimetric Phase-Sensitive Radar Sounding, *Annals of Glaciology*, doi.org/10.1017/aog.2020.6

- 2020 G. Steinbruegge*, J.R.C. Voight, D.M. Schroeder, A. Stark, M.S. Haynes, K.M. Scanlan, C.W. Hamilton, D.A. Young, H. Hussman, C. Grima, D.D. Blankenship, The Surface Roughness of Europa derived from Galileo Stereo Images, *Icarus*, doi.org/10.1016/j.icarus.2020.113669
- 2020 C. Ellworth*, D.M. Schroeder, M.R. Siegfried*, Interpreting Englacial Layer Deformation in the Presence of Complex Ice Flow History and Survey Geometry, *Annals of Glaciology*, doi.org/10.1017/aog.2019.41
- 2019 C. Culha*, D.M. Schroeder, T.M. Jordan*, M. Haynes, Assessing Europa's Eutectic using Radar Sounding, *Icarus*, doi.org/10.1016/j.icarus.2019.113578
- 2019 D.M. Schroeder, E.M. MacKie*, T.T. Creyts, J.B. Anderson, A subglacial hydrologic drainage hypothesis for silt sorting and deposition during retreat in Pine Island Bay, *Annals of Glaciology*, doi.org/10.1017/aog.2019.44
- 2019 K. Winter, J. Woodward, N. Ross, S.A. Dunning, A.S. Hein, M.J. Westoby, R. Culberg*, S. Marrero, D.M. Schroeder, S.M. Marrero, D.M. Schroeder, D.E. Sugden, M.J. Siegert, Radar-Detected Englacial Debris in the West Antarctic Ice Sheet, *Geophysical Research Letters*, doi.org/10.1029/2019GL084012
- 2019 M.A. Cooper, T.M. Jordan*, D.M. Schroeder, M.J. Siegert, C.N. Williams, J.L. Bamber, Subglacial roughness of the Greenland Ice Sheet: relationship with contemporary ice velocity and geology, *The Cryosphere*, doi.org/10.5194/tc-13-3093-2019
- 2019 D.M. Schroeder, J.A. Dowdeswell, M.J. Siegert, R.G. Bingham, W. Chu*, E.J. MacKie*, M.R. Siegfried*, K.I. Vega*, John R. Emmons, K. Winstein, Multi-Decadal Observations of the Antarctic Ice Sheet from Archival Radar Film, *Proceedings of the National Academy of Sciences*, doi.org/10.1073/pnas.1821646116
- 2019 D. Castelletti*, D.M. Schroeder, E. Mantelli*, A.M. Hilger*, Layer Optimized SAR Processing and Slope Estimation in Radar Sounder Data, *Journal of Glaciology*, doi.org/10.1017/jog.2019.72
- 2019 M.C. Kennicutt, D. Bromwich, D. Liggett, B. Njåstad, L. Peck, S.R. Rintoul, C. Ritz, M.J. Siegert, A. Aitken, C.M. Brooks, J. Cassano, S. Chaturvedi, D. Chen, K. Dodds, N.R. Golledge, C. Le Bohec, M. Leppe, A. Murray, P.C. Nath, M.N. Raphael, M. Rogan-Finnemore, D.M. Schroeder, L. Talley, T. Travouillon, D.G. Vaughan, L. Wang, A.T. Weatherwax, H. Yang, S.L. Chown, Sustained Antarctic Research: A 21st Century Imperative, *One Earth*, doi.org/10.1016/j.oneear.2019.08.014
- 2019 C. Grima, I. Koch, J.S. Greenbaum, K.S. Soderlund, D.D. Blankenship, D.A. Young, D.M. Schroeder, S. Fitzsimmons, Surface and Basal Boundary Conditions at the Southern McMurdo and Ross Ice Shelves, Antarctica, *Journal of Glaciology*, doi.org/10.1017/jog.2019.44
- 2019 T.M. Jordan*, D.M. Schroeder, D. Castelletti*, J. Li, J. Dall, A Polarimetric Coherence Method to Determine Ice Crystal Orientation Fabric from Radar Sounding: Application to the NEEM Ice Core Region, *IEEE Transactions on Geoscience and Remote Sensing*, doi.org/10.1109/TGRS.2019.2921980
- 2019 R. Michaelides*, D.M. Schroeder, Doppler-Based Discrimination of Radar Sounder Target Scattering Properties: A case study of resolving subsurface water geometry in Europa's icy shell, *Icarus*, doi.org/10.1016/j.icarus.2019.02.037
- 2018 K. Wang, W.L. Ellsworth, G.C. Beroza, G. Williams, M. Zhang, D.M. Schroeder, J. Rubinstein; Seismology with Dark Data: Image-Based Processing of Analog Records Using Machine Learning for the Rangely Earthquake Control Experiment, *Seismological Research Letters*, doi.org/10.1785/0220180298
- 2018 W. Chu*, D.M. Schroeder, M.R. Siegfried*, Retrieval of Englacial Firn Aquifer Thickness from Ice-Penetrating Radar Sounding in Southeastern Greenland, *Geophysical Research Letters*, doi.org/10.1029/2018GL079751
- 2018 A.K. Kendrick*, D.M. Schroeder, W. Chu*, T.J. Young*, P. Christoffersen, S.H. Doyle, J.E. Box, A. Hubbard, B. Hubbard, P.V. Brennan, K.W. Nicholls, L.B. Lok, Surface Meltwater Impounded by Seasonal Englacial Storage in West Greenland, *Geophysical Research Letters*, doi.org/10.1029/2018GL079787

- 2018 T.M. Jordan^{*}, C.N. Williams, D.M. Schroeder, Y.M. Martos, M.A. Cooper, M.J. Siegert, J.D. Paden, P. Huybrechts, J.L. Bamber, A Constraint Upon the Basal Water Distribution and Basal Thermal State of the Greenland Ice Sheet from Radar Bed-Echoes, *The Cryosphere*, doi.org/10.5194/tc-2018-53
- 2018 S.T. Peters^{*}, D.M. Schroeder, D. Castelletti^{*}, M. Haynes, A. Romero-Wolf, In-Situ Demonstration of a Passive Radio Sounding Approach Using the Sun for Echo Detection, *IEEE Transactions in Geoscience and Remote Sensing*, doi.org/10.1109/TGRS.2018.2850662
- 2018 T.J. Young^{*}, D.M. Schroeder, P. Christoffersen, L. Lok, K.W. Nicholls, P.V. Brennan, S.H. Doyle, B. Hubbard, A. Hubbard, Resolving Glacier Internal and Basal Geometry of Ice Masses Using Imaging Phase-Sensitive Radar, *Journal of Glaciology*, doi.org/10.1017/jog.2018.54
- 2018 M.S. Haynes, E. Chapin, D.M. Schroeder, Geometric Power Fall-off in Radar Sounding, *IEEE Transactions in Geoscience and Remote Sensing*, doi.org/10.1109/TGRS.2018.2840511
- 2018 W. Chu^{*}, D.M. Schroeder, H. Seroussi, T. Creyts, R.E. Bell, Complex basal thermal transition near the onset of Petermann Glacier, Greenland, *Journal of Geophysical Research*, doi.org/10.1029/2017JF004561
- 2018 A. Rutishauser, D.D. Blankenship, M. Sharp, M.L. Skidmore, J.S. Greenbaum, C. Grima, D.M. Schroeder, J.A. Dowdeswell, D.A. Young, Discovery of a Hypersaline Subglacial Lake Complex Beneath Devon Ice Cap, Canadian Arctic, *Science Advances*, doi.org/10.1126/sciadv.aar4353
- 2018 G. Steinbruegge^{*}, D.M. Schroeder, M.S. Haynes, H. Hussmann, C. Grima, D.D. Blankenship, Assessing the potential for measuring Europa's tidal Love number h_2 using radar sounder and topographic imager data, *Earth and Planetary Science Letters*, doi.org/10.1016/j.epsl.2017.11.028
- 2018 B.A. Campbell, D.M. Schroeder, J.L. Whitten, Mars Radar Clutter and Surface Roughness Characteristics from MARSIS Data, *Icarus*, doi.org/10.1016/j.icarus.2017.07.011
- 2018 D.M. Schroeder, A.M. Hilger^{*}, J.D. Paden, D.A. Young, H.F.J. Corr, Ocean Access Beneath the Southwest Tributary of Pine Island Glacier, West Antarctica, *Annals of Glaciology*, doi.org/10.1017/aog.2017.45
- 2017 D. Castelletti^{*}, D.M. Schroeder, S. Hensley, C. Grima, G. Ng, D.A. Young, Y. Gim, L. Bruzzone, A. Moussessian, D.D. Blankenship, An Interferometric Approach to Cross-Track Clutter Detection in Two Channel VHF Radar Sounders, *IEEE Transactions on Geoscience and Remote Sensing*, doi.org/10.1109/TGRS.2017.2721433
- 2017 T.M. Jordan^{*}, M.A. Cooper, D.M. Schroeder, C.N. Williams, J.D. Paden, M.J. Siegert, J.L. Bamber, Self-affine subglacial roughness: consequences for radar scattering and basal water discrimination in northern Greenland, *The Cryosphere*, doi.org/10.5194/tc-11-1247-2017
- 2017 K. Kalousova^{*}, D.M. Schroeder, K. Soderlund, Radar attenuation in Europa's ice shell: Obstacles and opportunities for constraining the shell thickness and its thermal structure, *Journal of Geophysical Research*, doi.org/10.1002/2016JE005110
- 2017 Y. Aglyamov^{*}, D.M. Schroeder, S.D. Vance, Bright prospects for radar detection of Europa's ocean, *Icarus*, doi.org/10.1016/j.icarus.2016.08.014
- 2016 W. Chu^{*}, D. M. Schroeder, H. Seroussi, T. Creyts, S. J. Palmer, R. E. Bell, Extensive winter subglacial water storage beneath the Greenland Ice Sheet, *Geophysical Research Letters*, doi.org/10.1002/2016GL071538
- 2016 D.M. Schroeder, H. Seroussi, W. Chu, D.A. Young, Adaptively constraining radar attenuation and temperature across the Thwaites Glacier catchment using bed echoes, *Journal of Glaciology*, doi.org/10.1017/jog.2016.100
- 2016 A. Khazendar, E. Rignot, D.M. Schroeder, H. Seroussi, M.P. Schodlok, B. Scheuchl, J. Mouginot, T. Sutterley, I. Velicogna, Rapid submarine ice melting in the grounding zones of ice shelves in West Antarctica, *Nature Communications*, [doi: 10.1038/ncomms13243](https://doi.org/10.1038/ncomms13243)

- 2016 D.M. Schroeder, A. Romero-Wolf, L. Carrer, C. Grima, B.A. Campbell, W. Kofman, L. Bruzzone, D.D. Blankenship, Assessing the potential for passive radio sounding of Europa and Ganymede with RIME and REASON, *Planetary and Space Science*, doi.org/10.1016/j.pss.2016.10.007
- 2016 A. Romero-Wolf, D.M. Schroeder, P. Ries, B.G. Bills, C. Naudet, B.R. Scott, R. Treuhaft, S. Vance, Prospects of passive radio detection of a subsurface ocean on Europa with a lander, *Planetary and Space Science*, doi.org/10.1016/j.pss.2016.06.010
- 2016 M.J. Siegert, N. Ross, J. Li, D.M. Schroeder, D. Rippin, D. Ashmore, R. Bingham, P. Gogineni, Subglacial Controls on the Flow of Institute Ice Stream, West Antarctica, *Annals of Glaciology*, doi.org/10.1017/aog.2016.17
- 2016 M.G.P. Cavitte, D.D. Blankenship, D.A. Young, D.M. Schroeder, F. Parrenin, E. LeMeur, J.A. MacGregor, M.J. Siegert. Deep Radiostratigraphy of the East Antarctic Plateau: Connecting the Dome C and Vostok Ice Core Sites, *Journal of Glaciology*, doi.org/10.1017/jog.2016.11
- 2016 D.M. Schroeder, C. Grima, D.D. Blankenship. Evidence for Variable Grounding-Zone and Shear-Margin Basal Conditions Across Thwaites Glacier, West Antarctica, *Geophysics*, doi.org/10.1190/geo2015-0122.1
- 2015 D.A. Young, D.M. Schroeder, D.D. Blankenship, S.D. Kempf, E. Quartini. The Distribution of Basal Water Between Antarctic Subglacial Lakes from Radar Sounding, *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, doi.org/10.1098/rsta.2014.0297
- 2015 C. Grima, D.D. Blankenship, D.M. Schroeder. Radar Signal Propagation through Europa Ionosphere, *Planetary and Space Science*, doi.org/10.1016/j.pss.2015.08.017
- 2015 J.S. Greenbaum, D.D. Blankenship, D.A. Young, A.R.A. Aitken, B. Legresy, D.M. Schroeder, T.G. Richter, J.L. Roberts, R.C. Warner, T.D. van Ommen, M.J. Siegert. Ocean access to a cavity beneath Totten Glacier in East Antarctica, *Nature Geoscience*, doi.org/10.1038/ngeo2388
- 2015 D.M. Schroeder, D.D. Blankenship, R.K. Raney, C. Grima. Estimating Subglacial Water Geometry from the Specularity of Radar Bed Echoes: Application to Thwaites Glacier, West Antarctica. *IEEE Geoscience and Remote Sensing Letters*, doi.org/10.1109/LGRS.2014.2337878
- 2014 D.M. Schroeder, D.D. Blankenship, D.A. Young, A.E. Kirshner, J.B. Anderson. Airborne Radar Sounding Evidence for Deformable Sediments and Outcropping Bedrock Beneath Thwaites Glacier, West Antarctica, *Geophysical Research Letters*, doi.org/10.1002/2014GL061645
- 2014 G. Grima, D.D. Blankenship, D.A. Young, D.M. Schroeder. Surface Slope Control on Firn Density at Thwaites Glacier, West Antarctica: Results from airborne radar sounding, *Geophysical Research Letters*, doi.org/10.1002/2014GL061635
- 2014 D.M. Schroeder, D.D. Blankenship, D.A. Young, E. Quartini. Evidence for Elevated and Spatially Heterogeneous Geothermal Flux Beneath the West Antarctic Ice Sheet, *Proceedings of the National Academy of Sciences*, doi.org/10.1073/pnas.1405184111
- 2014 C. Grima, D.M. Schroeder, D.D. Blankenship, D.A. Young. Planetary landing-zone reconnaissance using ice-penetrating radar data: Concept validation in Antarctica, *Planetary and Space Science*, doi.org/10.1016/j.pss.2014.07.018
- 2014 A.E. Witus, C.M. Branecky, J.B. Anderson, W. Szczucinski, D.M. Schroeder, D.D. Blankenship, M. Jakobsson. Meltwater Intensive Glacial Retreat in Polar Environments and Investigation of Associated Sediments: Example from Pine Island Bay, West Antarctica, *Quaternary Science Reviews*, doi.org/10.1016/j.quascirev.2013.11.021
- 2013 D.M. Schroeder, D.D. Blankenship, D.A. Young. Evidence for a Water System Transition Beneath Thwaites Glacier, West Antarctica, *Proceedings of the National Academy of Sciences*, doi.org/10.1073/pnas.1302828110

- 2013 J.A. MacGregor, G.A. Catania, H.B. Conway, D.M. Schroeder, I.R. Joughin, D.A. Young, S.D. Kempf, D.D. Blankenship. Weak Bed Control of the Eastern Shear Margin of Thwaites Glacier. *Journal Glaciology*, doi.org/10.3189/2013JoG13J050
- 2012 A.P. Wright, D.A. Young, J.L. Roberts, D.M. Schroeder, J.L. Bamber, J.A. Dowdeswell, N.W. Young, A.M. Le Brocq, R.C. Warner, A.J. Payne, D.D. Blankenship, T.D. van Ommen, M.J. Siegert. Evidence for a Hydrological Connection Between the Ice Divide and Ice Sheet Margin in the Aurora Subglacial Basin Sector of East Antarctica, *Journal of Geophysical Research Earth Surface*, doi.org/10.1029/2011JF002066
- 2011 D.A. Young, A.P. Wright, J.L. Roberts, R.C. Warner, N.W. Young, J.S. Greenbaum, D.M. Schroeder, D.E. Sugden, J.W. Holt, D.D. Blankenship, T. Van Ommen, M.J. Siegert. A Dynamic Early East Antarctic Ice Sheet Suggested by Ice Covered Fjord Landscapes, *Nature*, doi.org/10.1038/nature10114

Refereed Conference Papers (* indicates student or postdoctoral advisee, 2nd author is typically senior author)

- 2019 S.T. Peters*, D.M. Schroeder, D. Castelletti*, M. Haynes, A. Romero-Wolf, Two-Dimensional Image Formation with Passive Radar Using the Sun for Echo Detection, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2019.8897880
- 2019 R. Culberg*, D.M. Schroeder, Radar Scattering in Firn and its Implications for VHF/UHF Orbital Ice Sounding, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2019.8898991
- 2019 D.M. Schroeder, D. Castelletti*, I Pena*, Revisiting the Limits of Azimuth Processing Gain for Radar Sounding, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2019.8898737
- 2018 D. Castelletti*, D.M. Schroeder, E. Mantelli*, A.M. Hilger*, Unfocused SAR Processing for Englacial Layer Slope Estimation Using Radar Sounder Data, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2018.8518928
- 2018 L. Carrer*, D.M. Schroeder, A. Romero-Wolf, P.A. Reis, L. Bruzzone, Noise Character Constraints on Passive Radio Soundings of Jupiter's Icy Moons Using Jovian Decametric Radiation, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2018.8517931
- 2018 S.T. Peters*, D.M. Schroeder, D. Castelletti*, M.S. Haynes, A. Romero-Wolf, First In-Situ Demonstration of Passive Radio Sounding Using the Sun as a Source for Echo Detection, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2018.8517970
- 2015 D. Castelletti*, D.M. Schroeder, S. Hensley, C. Grima, G. Ng, D. Young, Yonggyu Gim, L. Bruzzone, A. Moussessian, D. D. Blankenship, Clutter Detection Using Two-Channel Radar Sounder Data, IEEE Geoscience and Remote Sensing Symposium, doi.org/10.1109/IGARSS.2015.7325950

INVITED TALKS

- 2020 European Geosciences Union, Vienna
- 2020 IEEE Geoscience and Remote Sensing Symposium, Waikoloa
- 2020 Radiation Laboratory, University of Michigan
- 2020 Department of Geophysics, Colorado School of Mines
- 2019 Rosenthal School of Marine and Atmospheric Science, University of Miami
- 2019 Department of Mathematics and Physics, Roma Tre University
- 2019 Institute of Geophysics, ETH Zurich
- 2019 National Space Institute, Technical University of Denmark
- 2019 Progress in Electromagnetics Research Symposium, Rome
- 2019 Department of Climate and Space Sciences and Engineering, University of Michigan
- 2019 Department of Earth Sciences, University of Oregon

Schroeder C.V. May 2020

- 2018 Department of Earth and Planetary Science, Harvard University
- 2018 Department of Earth, Planetary, and Space Sciences, UCLA
- 2018 Jones Seminar, Dartmouth University Thayer School of Engineering
- 2018 Center for the Origin, Dynamics, and Evolution of the Planets, UC Santa Cruz
- 2018 Department of Earth, Environmental, and Planetary Sciences, Brown University
- 2018 Department of Aerospace Engineering, University of Texas at Austin
- 2018 American Physical Society April Meeting, Columbus
- 2018 Department of Earth and Planetary Sciences, Washington University in Saint Louis
- 2018 Keynote, Taking the Temperature of the Antarctic Continent Workshop, Hobart
- 2018 Department of Earth System Science, Stanford University
- 2017 Europa Science Series, Jet Propulsion Laboratory, Caltech
- 2017 Department of Earth and Planetary Science, Johns Hopkins University
- 2017 Berkeley Seismology Lab, University of California, Berkeley
- 2017 Keynote, International Glaciological Society Symposium, Boulder
- 2017 Advanced Instrumentation Seminar, SLAC National Accelerator Laboratory
- 2017 School of Geosciences, University of Edinburgh
- 2017 Keynote, Canadian Geophysical Union and CSAFM Joint Annual Scientific Meeting, Vancouver
- 2017 Symposium Keynote, Department of Electronic and Electrical Engineering, University College London
- 2017 Department of Earth and Space Sciences, University of Washington
- 2016 Institute of Planetary Research, German Aerospace Center
- 2016 Glaciology Center Seminar, Bristol University
- 2016 Remote Sensing Laboratory, University of Trento
- 2016 Physics Department, Bucknell University
- 2016 Planetary Seminar Series, Georgia Institute of Technology
- 2016 Institute for Geophysics and Planetary Physics, UC Santa Cruz
- 2016 Lamont-Doherty Earth Observatory, Columbia University
- 2015 Scripps Institute of Oceanography, University of California San Diego
- 2015 AGU Fall Meeting, San Francisco
- 2015 Climate Center Seminar, Jet Propulsion Laboratory
- 2015 Department of Geophysics, Stanford University
- 2015 Radar Science and Engineering Section, Jet Propulsion Laboratory, Caltech
- 2015 Department of Electrical Engineering, University of Colorado, Boulder
- 2014 Department of Geophysics, Stanford University
- 2014 Workshop on Instruments for Polar Geology and Geophysics Research, NASA/NSF
- 2014 Norwegian Polar Research Institute, Tromsø
- 2014 Department of Geology, University of Kansas
- 2013 Earth and Planetary Science, Johns Hopkins University
- 2013 Radar Science and Engineering Section, Jet Propulsion Laboratory, Caltech
- 2012 Institute for Geophysics, University of Texas at Austin
- 2012 Space Research Group, Applied Physics Lab, Johns Hopkins University
- 2011 AGU Fall Meeting, San Francisco

CONFERENCE PARTICIPATION (* indicates student or postdoctoral advisee, 2nd author is typically senior author)

- 2020 D.M. Schroeder, Observing Evolving Subglacial Conditions with Multitemporal Radar Sounding, EGU General Assembly, Vienna, May 4th - 8th (invited keynote)
- 2020 T.M. Jordan^{*}, A. Brisbourne, C. Martin, R. Schlegel, D.M. Schroeder, A. Smith, Relating polarimetric radar measurements of ice fabric to ice-flow enhancement of Rutford Ice Stream, EGU General Assembly, Vienna, May 4th - 8th
- 2020 E. Dawson^{*}, D.M. Schroeder, W. Chu^{*}, E. Mantelli^{*}, H. Seroussi, Investigating basal thaw as a potential driver of ice flow acceleration in Antarctica, EGU General Assembly, Vienna, May 4th - 8th
- 2020 S.T. Peters^{*}, D.M. Schroeder, A. Romero-Wolf, G. Steinbruegge^{*}, Passive Radar Investigations of Io Using Jupiter's Radio Emissions, LPSC, The Woodlands, March 16th - 20th.
- 2020 G. Steinbruegge^{*}, A. Rivoldini, M. Dumberry, G. Schubert, D.M. Schroeder, K.M. Soderlund, The (Still) Problematic Case of Mercury's Interior Structure, LPSC, The Woodlands, March 16th - 20th.
- 2020 J.H. Roberts, A.M. Rymer, M.L. Cabel, F. Nimmo, C.S. Paty, M.T. Bland, C.M. Elder, H. Korth, T.B. McCord, W.B. McKinnon, R.T. Pappalardo, C.A. Raymond, L. Roth, J. Saur, D.M. Schroeder, G. Steinbruegge^{*}, K.M. Soderlund, G. Tobie, S.D. Vance, D.A. Young, D.A. Senske, Integrated Europa Interior Science with Europa Clipper, LPSC, The Woodlands, March 16th - 20th.
- 2020 J.R.C. Voigt, G. Steinbruegge^{*}, N.S. Wolfenbarger, C.W. Hamilton, K.M. Soderlund, D.A. Young, S. Vance, D.M. Schroeder, D.D. Blankenship, Melt Mobilization on Europa and its Application to Mannan Crater, LPSC, The Woodlands, March 16th - 20th.
- 2020 A. Romero-Wolf, C. Devin, G. Franklin, D. Hawkins, M. Haynes, M. Lee, J. Lasio, J.Liu, K. Mitchell, S.T. Peters, D.M. Schroeder, Passive Sounding of Lunar Lava Tubes, Planetary Caves Conference, February 18th - 21st, San Antonio, TX
- 2020 J. McCullough, B. Macintosh, M. Milar-Blanchaer, L. Schaefer, D.M. Schroeder, D. De Rosa, Detection Sensitivity for the Gemini Planet Imager (GPI) to Potential Europa Plumes, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 A. Broome^{*}, D.M. Schroeder, Constraining and Correcting Surface and Bed Roughness Effects in Multi-frequency Radar Sounding Data, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 H. Tran^{*}, D.M. Schroeder, N. Bienert^{*}, Improvements to MIMO Radio Echo Sounder Array Design for Subsurface Imaging, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 N.L. Bienert^{*}, D.M. Schroeder, S.T. Peters^{*}, E. Dawson^{*}, E.J. MacKie^{*}, M.R. Siegfried^{*}, Inferring Temperature Distribution in Shear Margins from Large-Offset Bistatic Radar Sounding, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 T.M. Jordan^{*}, D.M. Schroeder, A. Brisbourne, C. Martin, C.W. Elsworth^{*}, M.R. Siegfried^{*}, R. Schlegel, A. Smith, Measurement of Ice Fabric within Ice Streams using Polarimetric Phase-Sensitive Radar Sounding, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 J. Jones^{*}, D.M. Schroeder, A. Broome^{*}, Mobilizing an APRES through Quasi-Pulsed Operation, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 J. McCullough, B. Macintosh, M. Millar-Blanchaer, L. Schaefer, D.M. Schroeder, R. De Rosa, Detection Sensitivity for the Gemini Planet Imager (GPI) to Potential Europa Plumes, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 J. Bessette^{*}, T.M. Jordan^{*}, D.M. Schroeder, J.A. MacGregor, Radar-sounding evidence for a subglacial groundwater table in Hiawatha Crater, Greenland, AGU Fall Meeting, San Francisco, December 9th - 13th
- 2019 A. Conger^{*}, D.M. Schroeder, E.J. MacKie^{*}, Radiometric Characterization of Subglacial Lake Floors from Archival Radar Data, AGU Fall Meeting, San Francisco, December 9th - 13th

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- 2019 D.M. Schroeder, E.J. MacKie*, A. Conger*, Radiometric signature of subglacial conditions in archival radar sounding data recovered from optical film, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 G. Seinbruegge*, M. Haynes, K.M. Scanlan, D.A. Young, S.D. Kempf, D.M. Schroeder, D.D. Blankenship, SHARAD Altimetry on Mars: Towards an improved, global digital terrain model, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 E. Mantelli*, M. Bryant, D.M. Schroeder, J. Suckale, D. Castelletti*, L. Raess, H. Seroussi, M.J. Siegert, Spatial distribution of englacial layer slope as a constraint on ice sheet basal conditions, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 R. Culberg*, D.M. Schroeder, Spatial Extension of Deep Ice Core Electrical Stratigraphy by Radar Sounding, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 W. Chu*, D. M. Schroeder, S. Livingstone, S. Vijay, M. King, R. Culberg*, N. Karlsson, A. Messerli, 25 years of airborne radar sounding: Insights into the time varying changes in Greenland glacial hydrology, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 E.J. MacKie*, D.M. Schroeder, Paleo Observations Used to Geostatistically Simulate the Subglacial Geology of Thwaites Glacier, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 S.T. Peters*, D.M. Schroeder, W. Chu*, M. Haynes, A. Romero-Wolf, Passive radio sounding with ambient signals of opportunity to monitor cryospheric subsurface conditions, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 M. Altenbur* g, D.M. Schroeder, R. Culberg*, N.L. Bienert*, Testing the Feasibility of Orbital Altitude Radar Sounding using a Multi-frequency Radar System, AGU Fall Meeting, San Francisco, December 9th – 13th
- 2019 N. Bienert*, D.M. Schroeder, S.T. Peters*, M.R. Siegfried*, E.J. MacKie*, E. Dawson*, Inferring Temperature Distribution in Shear Margins using an ApRES and Software Defined Radio in a Bistatic Configuration, WAIS Workshop, Julian, October 16th – 18th
- 2019 W.Chu*, D.M. Schroeder, H. Seroussi, M. Morlighem, M. Siegery, Using radar sounding observations to improve numerical models' estimates on ice sheet temperatures in West Antarctica, WAIS Workshop, Julian, October 16th – 18th
- 2019 R. Culberg*, D.M. Schroeder, Englacial Layers in Radar Sounding Data Modeled from Ice Core Electrical Stratigraphy, WAIS Workshop, Julian, October 16th – 18th
- 2019 E. Dawson*, D.M. Schroeder, W. Chu*, E. Mantelli*, A. Miltenberger*, H. Seroussi, Vulnerability of the Antarctic ice sheet to basal thermal regime change: Integrating observations and models, WAIS Workshop, Julian, October 16th – 18th
- 2019 E.J. MacKie*, D.M. Schroeder, Geostatistically Simulating the Topography and Geology of the Amundsen Sea Embayment, WAIS Workshop, Julian, October 16th – 18th
- 2019 S.T. Peters, D.M. Schroeder, W. Chu, M. Haynes, A. Romero-Wolf, Passive radio sounding using the Sun as a signal to monitor subsurface processes, WAIS Workshop, Julian, October 16th – 18th
- 2019 D.A. Young, J.A. Bodart, E. Quartini, R.G. Bingham, D.M. Schroeder, D.D. Blankenship, Integrating englacial reflectors across the Amundsen Sea Embayment: A progress report, WAIS Workshop, Julian, October 16th – 18th
- 2019 G. Steinbruegge*, J.R.C. Voigt, D.M. Schroeder, A. Stark, M.S. Haynes, K.M. Scanlan, C.W. Hamilton, D.A. Young, H. Hussmann, C. Grima, D.D. Blankenship, Reassessing Europa's Surface Roughness, EPSC-DPS Joint Meeting, Geneva, September 15th – 20th
- 2019 G.W. Patterson, L.M. Carter, A.M. Stickle, J.T Cahill, M.C. Nolan, G.A. Morgan, D.M. Schroeder, the Mini RF Team, Mini-RF S- and X-band Bistatic Observations of the Moon, EPSC-DPS Joint Meeting, Geneva, September 15th – 20th

Schroeder C.V. May 2020

- 2019 F. Turner, G.W. Patterson, R. Jensen, D. Castelletti*, D.M. Schroeder, Empirical Noise Estimation in Time-Doman Back Projection, IGARSS, Yokohama, July 28th – August 2nd
- 2019 D. Castelletti*, D.M. Schroeder, T.M. Jordan*, D.A. Young, Repeat-Pass Interferometry Applied to Englacial Layer Velocity Estimation Using Radar Sounding Data, IGARSS, Yokohama, July 28th – August 2nd
- 2019 S.T. Peters*, D.M. Schroeder, D. Castelletti*, M. Haynes, A. Romero-Wolf, Two Dimensional Image Formation with Passive Radar Using the Sun for Echo Detection, IGARSS, Yokohama, July 28th – August 2nd
- 2019 R. Culberg*, D.M. Schroeder, Radar Scattering in Firn and its Implications for VHF/UHF Orbital Ice Sounding, IGARSS, Yokohama, July 28th – August 2nd
- 2019 D.M. Schroeder, D. Castelletti*, I Pena*, Revisiting the Limits of Azimuth Processing Gain for Radar Sounding, IGARSS, Yokohama, July 28th – August 2nd
- 2019 S.T. Peters*, D.M. Schroeder, W. Chu*, D. Castelletti*, M. Haynes, A. Romero-Wolf, Passive radio sounding for glaciological investigations of subsurface processes, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 T.M. Jordan*, D.M. Schroeder, D. Castelletti*, J. Li, J. Dall, A polarimetric coherence method to determine ice crystal orientation fabric from radar sounding: application to the NEEM ice core region, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 T.M. Jordan*, D.M. Schroeder, C. Elsworth*, J. Dall, M. Siegfried*, Estimation of ice fabric within the Whillans Ice Stream using polarimetric phase-sensitive radar sounding, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 T.M. Jordan*, D. Besson, A. Romero-Wolf, D.M. Schroeder, Measuring and modelling the effects of fabric anisotropy on oblique radio wave propagation at the South Pole Ice Core Experiment (SPICE) for neutrino detection, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 A. Romero-Wolf, D.M. Schroeder, S.T. Peters*, B. Bills, D.M. Blankenship, L. Bruzzone, B. Campbell, L. Carrer, C. Grima, E. Heggy, Status and prospects of passive sounding with radio astronomical sources, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 M. Goldberg*, D.M. Schroeder, D. Castelletti*, N. Ross, M. Siegert, Automated detection and characterization of Antarctic basal units using radar sounding data: demonstration in Institute Ice Stream, West Antarctica, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 S.T. Peters*, D.M. Schroeder*, M. Haynes, A. Romero-Wolf, Passive radio sounding with Jupiter's radio emissions to correct for Europa's ionospheric distortion, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 E.J. MacKie*, M. Murray*, A. Pollack, D.M. Schroeder, Producing multi-decadal observations of grounding line change in East Antarctica with archival radar data, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 E.J. MacKie*, D.M. Schroeder, Geostatistical simulations of subglacial topography used to study paleo and modern bed conditions in the Amundsen Sea sector, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 N. Bienert*, D.M. Schroeder, S.T. Peters*, M. Siegfried*, Improving constraints on englacial temperature and water distribution using an autonomous phase-sensitive radio echo sounder (ApRES) and a bistatic software defined receiver, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 R. Culberg*, D.M. Schroeder, Radar scattering in firn and the implications for orbital sounding, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th

Schroeder C.V. May 2020

- 2019 N. Bienert*, D.M. Schroeder, H. Tran*, M. Murray*, How to hack your ApRES, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 A. Miltenberger*, E. Dawson*, D.M. Schroeder, Constraining the englacial and basal thermal state in Dome Fuji, East Antarctic with radar attenuation models, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 R. Michealides*, D.M. Schroeder, Doppler-based discrimination of radar sounder target scattering properties: a case study of subsurface water geometry in Europa's ice shell, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 E. Mantelli*, D.M. Schroeder, H. Seroussi, M. Bryant, D. Castelletti*, M. Siegert, J. Suckale, Observational constraints from englacial layers on fast flow initiation of a West Antarctic ice stream, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 R. Delf*, R.G. Bingham, D.M. Schroeder, Interpretation of ice-sheet internal stratigraphy: a test-bed for automated approaches, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 O. Bartlett*, S. Palmer, D.M. Schroeder, E.J. MacKie*, T. Barrow, A. Graham, Geospatial simulations of airborne ice-penetrating radar survey reveals elevation under-measurement bias for ice sheet bed topography, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 J. Greenbaum, D.M. Schroeder, C. Grima, N. Gormelen, C. Dow, F. Habbal, J. Roberts, R. Warner, D. Gwyther, Surface and basal melting of the Totten Glacier Ice Shelf, East Antarctica, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 M.R. Siegfried*, D.M. Schroeder, Interpreting radar bed-echo power from active subglacial lakes on lower Mercer and Whillans ice streams, West Antarctica, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 E. Quartini, D.A. Young, M. Sudunagunta, D.M. Schroeder, D.D. Blankenship, Assessing the effect of subaerial volcanism on englacial attenuation in West Antarctica, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 E. Dawson*, D.M. Schroeder, A. Miltenberger*, W. Chu*, H. Seroussi, A comparison of radar-inferred temperature characterization techniques to investigate thermal regime changes in Antarctica, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 E. Dawson*, D.M. Schroeder, A.M Hilger*, D. Castelletti*, W. Chu*, T.M. Jordan*, H. Seroussi, D.A. Young, D. Vaughan, Multi-instrument synthesis of radar sounding observations of the Thwaites Glacier and Pine Island Glacier catchments, West Antarctica, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 T.T. Creyts, D.M. Schroeder, C. Grima, W. Chu*, T.M. Jordan*, J. Paden, R. Culberg*, Bed roughness as a control on the drainage of subglacial water, IGS Symposium on Five Decades of Radioglaciology, Stanford, July 8th – 12th
- 2019 D.M. Schroeder, E.J. MacKie*, T.T. Creyts, J.B. Anderson, A subglacial hydrologic switching hypothesis for silt sorting and deposition during ice sheet retreat in the in the Amundsen Sea Embayment, IGS Symposium on Glacial Erosion and Sedimentation, Madison, May 12th -17th
- 2019 E.J. MacKie*, D.M. Schroeder, Using radar and geostatistical simulations to compare paleo and modern bed morphology in Pine Island Bay, IGS Symposium on Glacial Erosion and Sedimentation, Madison, May 12th - 17th
- 2019 D.M. Schroeder, D. Castelletti*, E. Mantelli*, Layer-Optimized Synthetic Aperture Radar Processing for Slope Detection and Estimation, EGU, Vienna, April 7th - 12th

Schroeder C.V. May 2020

- 2019 D. Castelletti^{*}, D.M. Schroeder, T. Jordan^{*}, D.A. Young, Repeat-pass interferometry applied to englacial layer velocity estimation using radar sounder data, EGU, Vienna, April 7th - 12th
- 2019 M. Bryant, E. Mantelli^{*}, J. Suckale, D. Castelletti^{*}, M.J. Siegert, D.M. Schroeder, Observational constraints from englacial layers on fast flow initiation of a West-Antarctic ice stream, EGU, Vienna, April 7th - 12th
- 2019 T. Jordan^{*}, D.M. Schroeder, C. Elsworth^{*}, D. Castelletti^{*}, J. Li, M.R. Siegfried^{*}, J. Dall, Polarimetric coherence: a data analysis method to determine ice fabric from phase-sensitive radar sounding, EGU, Vienna, April 7th - 12th
- 2019 S.T. Peters^{*}, D.M. Schroeder, D. Castelletti^{*}, M.S. Haynes, A. Romero-Wolf, Correcting Europa's Ionospheric Distortion with Passive Radar Using Jovian Decametric Radiation, LPSC, The Woodlands, March 18th - 22nd
- 2018 W. Chu^{*}, D.M. Schroeder, M.R. Siegfried^{*}, Retrieval of Englacial Firn Aquifer Thickness from Ice-Penetrating Radar Sounding in Southeastern Greenland, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 D. Castelletti^{*}, D.M. Schroeder, E. Mantelli^{*}, Layer-Optimized Synthetic Aperture Radar Processing for Slope Detection and Estimation, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 T.M. Jordan^{*}, D.M. Schroeder, D. Castelletti^{*}, J. Li, J.L. Bamber, J. Dall, Ice Crystal Orientation Fabric Determined from Polarimetric Ice-Penetrating Radar Interferometry, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 E.J. MacKie^{*}, C. Scheidt, J. Caers, D.M. Schroeder, A new model for Antarctic subglacial lakes, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 T.T. Creyts, W. Chu^{*}, C. Grima, D.M. Schroeder, Bed roughness as a control on the drainage of subglacial water, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 M. Bryant, E. Mantelli^{*}, J. Suckale, D. Castelletti^{*}, M.J. Siegert, D.M. Schroeder, Characterizing the onset of fast flow at Institute Ice Stream, West Antarctica, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 N.L. Bienert^{*}, D.M. Schroeder, S.T. Peters^{*}, Multi-Static Observations Using a Stationary Phase Sensitive Ice Penetrating Radar to Constrain Temperature and Water-Content Anomalies Across Shear Margins, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 R. Culberg^{*}, A.K. Kendrick^{*}, A. Conger^{*}, D.M. Schroeder, An Airborne Radar Sounding Instrument Concept for Characterizing Water Storage in Greenland's Porous Ice and Firn, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 R. Delf^{*}, D.M. Schroeder, R. Bingham, Interpretation of ice-sheet internal stratigraphy: a test-bed for automated approaches, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 M. Goldberg^{*}, D.M. Schroeder, D. Castelletti^{*}, N. Ross, M.J. Siegert, Automated Detection and Categorization of Antarctic Basal Units Using Radar Sounding Data: Demonstration in Institute Ice Stream, West Antarctica, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 A. Mittenberger^{*}, D.M. Schroeder, N.B. Karlsson, O. Eisen, T. Binderm, Constraining the Englacial and Basal Thermal State Beneath the Dome Fuji Region, East Antarctica Using Airborne Radar Sounding Data, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 Dustin M. Schroeder, Andrew M. Hilger^{*}, Davide Castelletti^{*}, Winnie Chu^{*}, Thomas M. Jordan^{*}, Helene Seroussi, Duncan A. Young, David G. Vaughan Multi-Instrument Synthesis of Radar Sounding Observations of the Thwaites Glacier and Pine Island Glacier Catchments, West Antarctica, AGU Fall Meeting, Washington DC, December 10th - 14th

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- 2018 A. Gnanadesikan, J.F. Loehr, S. Bender, D.M. Schroeder, S.M. Burrows, Opportunities for Earth and Space Scientists within the largest US Team Science Competition, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 G. Steinbruegge*, J.R.C. Voight, Reassessing the surface roughness of Europa using Galileo stereo images, AGU Fall Meeting, Washington DC, December 10th - 14th
- 2018 M.R. Siegfried*, D.M. Schroeder, D. Castelletti*, Looking Forward and Backward: New Techniques for Quantifying Dynamic Surface-Height Changes With Radar Altimetry in Antarctica, 25 Years of Progress in Radar Altimetry, Pota Delgada, September 24th - 29th
- 2018 D.M. Schroeder, J.A. Dowdeswell, M.J. Siegert, R.G. Bingham, W. Chu*, E.J. MacKie*, M.R. Siegfried*, K.I. Vega*, J.R. Emmons, K. Winstein, Multi-Decadal Observations of the Antarctic Ice Sheet from Archival Radar Film, West Antarctic Ice Sheet Workshop, Stony Point, September 16th - 19th
- 2018 M.R. Siegfried*, D.M. Schroeder, Reconciling conflicting observations of active subglacial lakes: A case study on lower Mercer and Whillans ice streams, West Antarctic Ice Sheet Workshop, Stony Point, September 16th - 19th
- 2018 E. Mantelli*, D.M. Schroeder, M. Bryant, D. Castelletti*, C. Schoof, H. Seroussi, M.J. Siegert, J. Suckale, Characterizing the onset of fast flow at Institute Ice Stream, West Antarctic Ice Sheet Workshop, Stony Point, September 16th - 19th
- 2018 E.J. MacKie*, C. Scheidt, J. Caers, D.M. Schroeder, Simulating Antarctic bed topography to quantify uncertainty in subglacial water storage, West Antarctic Ice Sheet Workshop, Stony Point, September 16th - 19th
- 2018 Winnie Chu*, Andrew M. Hilger*, Dustin M. Schroeder, Davide Castelletti*, Riley Culberg*, Eliza Dawson* Thomas M. Jordan*, Helene Seroussi, Duncan A. Young, David G. Vaughan, Evidence of Basal Water Flow from the Bentley Subglacial Trench Controls on the Western Upstream Margin of Pine Island Glacier, West Antarctica, West Antarctic Ice Sheet Workshop, Stony Point, September 16th - 19th
- 2018 G. Steinbruegge*, L. Fanara, D. Haack, M. Hamm, A. Heffels, M. Maurice, A. Nikolaaou, Y. Rosas Ortiz, I. Varatharajan, D.M. Schroeder, K. Zikidis, H. Hussmann, T. Spohn, PRIME - A concept for passive radar investigation of Jupiter's moon Io, European Planetary Science Congress, Berlin, September 16th - 21st
- 2018 D. Castelletti*, D.M. Schroeder, E. Mantelli*, A.M. Hilger*, Unfocused SAR Processing for Englacial Layer Slope Estimation Using Radar Sounder Data, IEEE Geoscience and Remote Sensing Symposium, Valencia, July 23rd - 27th
- 2018 S.T. Peters*, D.M. Schroeder, D. Castelletti*, M.S. Haynes, A. Romero-Wolf, First In-Situ Demonstration of Passive Radio Sounding Using the Sun as a Source for Echo Detection, IEEE Geoscience and Remote Sensing Symposium, Valencia, July 23rd - 27th
- 2018 L. Carrer*, D.M. Schroeder, A. Romero-Wolf, P.A. Reis, L. Bruzzone, Noise Character Constraints on Passive Radio Soundings of Jupiter's Icy Moons Using Jovian Decametric Radiation, IEEE Geoscience and Remote Sensing Symposium, Valencia, July 23rd - 27th
- 2018 C.Grima, D.D. Blankenship, C. Paty, Y. Gim, W. Kurth, E. Chapin, D.M. Schroeder, J. Plaut, G.W. Patterson, A. Moussessian, D.A. Young, Investigating Europa's Plasma Environment From Radar Sounding, Committee on Space Research, Pasadena, July 14th - 22nd
- 2018 D.D. Blankenship, A. Moussessian, J. Plaut, G.W. Patterson, D.A. Young, K.M. Soderlund, D.M. Schroeder, C. Grima, A. Freedman, E. Chapin, J. Hoffman, S. Collins, Y. Gim, T.Ray, A. Romero-Wolf, The REASON Science Team, REASON for Europa, Committee on Space Research, Pasadena, July 14th - 22nd

Schroeder C.V. May 2020

- 2018 D.M. Schroeder, A.M. Hildger*, E.J. MacKie*, H.F.J. Corr, D.D. Blankenship, J.D. Paden, J.A. Dowdeswell, Multi-System, Multi-Decadal Radar Sounding of Thwaites and Pine Island Glaciers, Scientific Committee on Antarctic Research, Polar 2018 Open Science Conference, Davos, June 19th – 23rd
- 2018 M.R. Siegfried*, S. Adusumilli, H.A. Fricker, T.D. Scambos, D.M. Schroeder, B.E. Smith, Investigating Large Active Subglacial Lake Drainages in East Antarctica, Scientific Committee on Antarctic Research, Polar 2018 Open Science Conference, Davos, June 19th – 23rd
- 2018 W. Chu*, D.M. Schroeder, Quantifying Greenland Water Budget from Top to Bottom using Radar Sounding, Scientific Committee on Antarctic Research, Polar 2018 Open Science Conference, Davos, June 19th – 23rd
- 2018 E.J. MacKie*, D.M. Schroeder, J.A. Dowdeswell, K.I. Vega*, M.R. Siegfried*, W. Chu*, R.G. Bingham, Digitization and Analysis of the SPRI-NSF-TUD Radar Data Archive, Scientific Committee on Antarctic Research, Polar 2018 Open Science Conference, Davos, June 19th – 23rd
- 2018 E. Mantelli*, D. Castelletti*, D.M. Schroeder, J. Suckale, A.M. Hilger*, Improved Processing, Slope Estimation, and Ice Flow Interpretation Using Englacial Layer Data from Radar Sounding, International Glaciological Society Symposium on Timescales, Processes, and Glacier Dynamics, Buffalo, June 3rd – 8th
- 2018 M. Cooper*, T.M. Jordan*, D.M. Schroeder, M. Siegert, C. Williams, J. Bamber, Subglacial Roughness of the Greenland Ice Sheet: Relationship with Contemporary Ice Velocity and Geology, EGU General Assembly, Vienna, April 8th – 13th
- 2018 T.M. Jordan*, C. Williams, D.M. Schroeder, Y. Martos, M. Cooper*, M.J. Siegert, J.D. Paden, P. Huybrechts, J. Bamber, A Constraint upon the Basal Water Distribution and Thermal State of the Greenland Ice Sheet from radar bed-echoes, EGU General Assembly, Vienna, April 8th – 13th
- 2018 E. Mantelli*, D. Castelletti*, D.M. Schroeder, J. Suckale, A.M. Hilger*, Improved Processing, Slope Estimation, and Ice Flow Interpretation Using Englacial Layer Data from Radar Sounding, EGU General Assembly, Vienna, April 8th – 13th
- 2018 G. Steinbruegge*, L. Fanara, D. Haak, M. Hamm, A. Heffels, M. Maurice, A. Nikolaou, Y. Rosas Ortiz, I. Varatharajan, D.M. Schroeder, K. Zikidis, H. Hussmann, T. Spohn, PRIME – A concept for passive radar investigation of Jupiter's moon Io, EGU General Assembly, Vienna, April 8th – 13th
- 2018 D.M. Schroeder, Observing Antarctic Ice-sheet Conditions Using Ice-Penetrating Radar, American Physical Society April Meeting, Columbus, April 14th – 17th (invited)
- 2018 W. Chu*, D.M. Schroeder, T. Jordan*, Y. Martos, Elevated Geothermal Heat Flux Produces Extensive Meltwater Beneath Large Ice Sheets: Lessons from Greenland, Taking the Temperature of the Antarctic Continent Workshop, Hobart, Tasmania, March 21st – 23rd
- 2018 D.M. Schroeder, W. Chu*, Observationally Constraining Geothermal Heat Flux Using Ice Penetrating Radar, Taking the Temperature of the Antarctic Continent Workshop, Hobart, March 21st – 23rd (keynote)
- 2018 C. Culha*, D.M. Schroeder, M. Haynes, Assessing the potential for detecting Europa's eutectic using radar sounding, Lunar and Planetary Science Conference, The Woodlands, Texas, March 19th – 23rd
- 2018 R.J. Michaelides*, D.M. Schroeder, Assessing the Ability of Radar Sounders to Discriminate between Corner-Reflections and Point Scatterers: Application to Europa's Chaos Terrains, Lunar and Planetary Science Conference, The Woodlands, Texas, March 19th – 23rd
- 2018 D.M. Schroeder, W. Chu*, A. K. Kendrick*, S.T. Peters*, D. Castelletti*, Constraining the Spatial and Temporal Evolution of Supraglacial and Englacial Meltwater Using Radar Sounding Data, Workshop on Antarctic Surface Hydrology and Future Ice Shelf Stability, Palisades, New York, February 21st – 22nd

Schroeder C.V. May 2020

- 2017 D.M. Schroeder, J.A. Dowdeswell, E.J. MacKie*, K.I. Vega*, J.R. Simmons*, K. Winstein, R.G. Bingham, T.J. Benham, High-Resolution Digitization of the Film Archive of SPRI/NSF/TUD Radar Sounding of the Antarctic Ice Sheet, AGU Fall Meeting, December 11th – 15th
- 2017 W. Chu*, D.M. Schroeder, H.L. Seroussi, T.T. Creyts, R.E. Bell, J.D. Paden, Constraining Greenland basal water extent and drainage morphology from radar reflectivity and specular analysis, AGU Fall Meeting, December 11th – 15th
- 2017 D. Castelletti*, D.M. Schroeder, Estimating Englacial Vertical Velocity from Airborne Radar Sounding Data, AGU Fall Meeting, December 11th – 15th
- 2017 A.M. Hilger*, D.M. Schroeder, H.F.J. Corr, D.D. Blankenship, J.D. Paden, Constraining Basal Conditions across the Amundsen Sea Embayment of West Antarctica using a Synthesis of the PASIN and HiCARS Radar Sounding Data, AGU Fall Meeting, December 11th – 15th
- 2017 S.T. Peters*, D.M. Schroeder, A. Romero-Wolf, M.S. Haynes, Preliminary Field Demonstration of Passive Radio Sounding Using the Sun as a Signal for Echo Detection, AGU Fall Meeting, December 11th – 15th
- 2017 T.M. Jordan*, C. Williams, D.M. Schroeder, Y.M. Matos, M. Cooper, M.J. Siegert, J.D. Paden, P. Huybrechts, J.L. Bamber, The Distribution of Basal Water Beneath the Greenland Ice Sheet from Radio-Echo Sounding, AGU Fall Meeting, December 11th – 15th
- 2017 M.R. Siegfried*, S. Adusumilli, H.A. Fricker, T.A. Scambos, D.M. Schroeder, B.E. Smith, Unraveling the cause of large surface-height anomalies on Slessor and Recovery glaciers, East Antarctica, with multi-mission data integration, December 11th – 15th
- 2017 A. Rutishauser, M.J. Sharp, D.D. Blankenship, M.L. Skidmore, C. Grima, D.M. Schroeder, J.S. Greenbaum, J.A. Dowdeswell, D.A. Young, Geophysical Investigations of Hypersaline Subglacial Water Systems in the Canadian Arctic: A Planetary Analog, AGU Fall Meeting, December 11th – 15th
- 2017 J.S. Greenbaum, D.D. Blankenship, C. Grima, D.M. Schroeder, K.M. Soderlund, D.A. Young, S.D. Kempf, M.J. Siegert, J.L. Roberts, R.C. Warner, T.D. van Ommen, Remote Characterization of Ice Shelf Surface and Basal Processes: Examples from East Antarctica, AGU Fall Meeting, December 11th – 15th
- 2017 L.M. Simkins, S.P. Carter, S. Greenwood, D.M. Schroeder, Meltwater drainage beneath ice sheets: What can we learn from uniting observations of paleo- and contemporary subglacial hydrology?, AGU Fall Meeting, December 11th – 15th
- 2017 D.M. Schroeder, A.K. Kendrick*, K.I. Vega*, E.J. MacKie*, A.M. Hilger*, S.T. Peters*, W.Chu*, Observing the Temporal Evolution of Subglacial Conditions Using Radar Sounding Data, WAIS Workshop, Couperville, Washington, October 8th – 11th
- 2017 D.M. Schroeder, A.K. Kendrick*, K.I. Vega*, E.J. MacKie*, A.M. Hilger*, S.T. Peters*, W.Chu*, Observing the Temporal Evolution of Subglacial Conditions Using Radar Sounding Data, WAIS Workshop, Coupeville, Washington, October 8th – 11th
- 2017 C.W. Ellsworth*, D.M. Schroeder*, M.R. Siegfried*, Internal layer deformation reveals past ice flow over the central sticky spot of Whillans Ice Stream, West Antarctica, WAIS Workshop, Coupeville, Washington, October 8th – 11th
- 2017 G.W. Patterson, L.M. Carter, A.M. Stickle, J.T.S. Cahill, M.C. Nolan, G.A. Morgan, D.M. Schroeder, Mini-RF Team, Mini-RF S- and X-Band Bistatic Radar Observations of the Moon, Annual Meeting of the Lunar Exploration Analysis Group, Columbia, MD, October 10th – 12th
- 2017 D.M. Schroeder, J.A. Dowdeswell, High Resolution Digitization of the Film Archive of SPRI/NSF/TUD Radar Sounding of the Antarctic Ice Sheet, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th (invited keynote)

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- 2017 T. Teisberg*, T. Diamandis*, L. Herrera*, I. Kushan*, A. Tedjarati*, D.M. Schroeder, Radar Sounder Development for an Expendable High Altitude Balloon, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th
- 2017 S.T. Peters*, D.M. Schroeder, A. Romero-Wolf, M. Haynes, Passive Radio Sounding for Terrestrial Glaciology: Preliminary Field Testing and Proof-of-Concept, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th
- 2017 A.K. Kendrick*, D.M. Schroeder, T.J. Young*, P. Christoffersen, P.V. Brennan, K.W. Nicholls, L. Lok, Estimating seasonal englacial water content using autonomous phase-sensitive radio-echo sounding data, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th
- 2017 A.M. Hilger*, D.M. Schroeder, H.F.J. Corr, D.D. Blankenship, J.D. Paden, Synthesizing the PASIN and HiCARS Radar Sounding Data to Constrain Basal Conditions across the Amundsen Sea Embayment of West Antarctica, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th
- 2017 T.J. Young*, D.M. Schroeder, P. Christoffersen, L. Lok, K.W. Nicholls, P.V. Brennan, S. Doyle, B. Hubbard, A. Hubbard, Observing and quantifying dipping internal reflectors in 3-dimensions using phase-sensitive ice-penetrating radar, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th
- 2017 W. Chu*, D.M. Schroeder, H. Seroussi, T.T. Creyts, R.E. Bell, Large Variability in Subglacial Drainage Processes Revealed by Airborne Radar Sounding Across the Greenland Ice Sheet, International Symposium on Polar Ice, Polar Climate, Polar Change: Remote Sensing and Modeling Advances in Understanding the Cryosphere, Boulder, August 14th – 19th
- 2017 D.M. Schroeder, Advances in Ice Penetrating Radar Time Series Observations, Canadian Geophysical Union and CSAFM Joint Annual Scientific Meeting, Vancouver, May 28th – 31st (invited keynote)
- 2017 D.M. Schroeder, A.M. Hilger*, J. Paden, H. Corr, D.D. Blankenship, Radar Sounding Investigations at the Boundary of Thwaites and Pine Island Glaciers, European Geosciences Union, April 23rd – 28th
- 2017 T. Jordan*, M. Cooper, J.L. Bamber, D.M. Schroeder, C. Williams, J.D. Paden, M.J. Siegert, P. Huybrechts, O. Gagliardini, F. Gillet-Chaulet, S.F. Price, Self-Affine Subglacial Roughness: Consequences for Radar Scattering and Basal Thaw Discrimination from Radio-Echo Sounding, EGU, April 23rd – 28th
- 2017 J.S. Greenbaum, D.M. Schroeder, C. Grima, F. Habbal, C. Dow, J.L. Roberts, D. Gwyther, T. van Ommen, M.J. Siegert, D.D. Blankenship, Morphological evidence and direct estimates of rapid melting beneath Totten Glacier Ice Shelf, East Antarctica, European Geosciences Union, April 23rd – 28th
- 2017 G. Steinbruegge*, D.M. Schroeder, M.S. Haynes, H. Hussmann, C. Grima, D.D. Blankenship, Assessing the Potential for Measuring Europa's Tidal Love Number h₂ Using Radar Sounder and Topographic Imager Data, European Geosciences Union, April 23rd – 28th
- 2017 C. Grima, D.D. Blankenship, C. Paty, Y. Gim, W. Kurth, E. Chapin, D.M. Schroeder, J.J. Plaut, G.W. Patterson, A. Moussessian, D.A. Young, Investigating Europa's Plasma Environment from Radar Sounding, 48th Lunar and Planetary Science Conference, The Woodlands, TX, March 20th – 24th
- 2017 D.D. Blankenship, C. Grima, D.A. Young, D.M. Schroeder, K.M. Soderlund, Y. Gim, J.J. Plaut, G.W. Patterson, A. Moussessian, A. Rutishauser, I. Koch, Understanding Europa's Ice Shell and Subsurface Water Through Terrestrial Analogs for Flyby Radar Sounding, 48th Lunar and Planetary Science Conference, The Woodlands, TX, March 20th – 24th

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- 2017 D.M. Schroeder, T.J. Young*, A. Kendrick*, L.B. Lok, P. Christoffersen, Stationary Radio Sounding Time Series Observations: Challenges and Opportunities, NASA PARCA Meeting, January 24th – 25th
- 2016 D.M. Schroeder, J.D. Paden, H.F.J. Corr, D.D. Blankenship, A.M. Hilger*, Cross-Instrument Radar Sounding Synthesis: Characterizing Basal Conditions Across the Amundsen Sea Embayment, AGU Fall Meeting, December 12th – 16th
- 2016 W. Chu*, D.M. Schroeder, H.L. Seroussi, T.T. Creyts, S.J. Palmer, R.E. Bell, Distinct Subglacial Drainage Patterns Revealed in High-Resolution Mapping of Basal Radar Reflectivity across Greenland, AGU Fall Meeting, December 12th – 16th
- 2016 M. Haynes, D.M. Schroeder, X. Duan, D. Arumugam, J.G. McMichael, S. Hensley, T. Cwick, Simulator for Large-scale Planetary and Terrestrial Radar Sounding, AGU Fall Meeting, December 12th – 16th
- 2016 T. Jordan, M. Cooper, J.L. Bamber, D.M. Schroeder, C. Williams, J.D. Paden, M.J. Siegert, P. Huybrechts, O. Gagliardini, F. Gillet-Chaulet, S.F. Price, An Integrated Assessment of Basal Scattering and Topographic Roughness Information Derived from Greenland Radar-Sounding Data, AGU Fall Meeting, Dec. 12th – 16th
- 2016 K. Kalousova*, D.M. Schroeder, K.M. Soderlund, Radar attenuation in Europa's ice shell: obstacles and opportunities for constraining shell thickness and thermal structure, Division of Planetary Sciences #48 and European Planetary Science Congress, Pasadena, October 16th - 21st
- 2016 J.S. Greenbaum, D.M. Schroeder, C.Y. Grima, C.F. Dow, D.D. Blankenship, D.A. Young, J.L. Roberts, D.E. Gwyther, A.H. Orsi, B. Huber, A. Leventer, R.C. Warner, T.D. van Ommen, and M.J. Siegert, Basal melt in channels and terraces beneath Totten Glacier, East Antarctica, Forum for Research into Ice Shelf Processes, October 4th – 6th
- 2016 E. Quartini, D.A. Young, D.M. Schroeder, D.D. Blankenship, An Evaluation of Geothermal Flux Along a Subglacial Volcano in the Executive Committee Range, SCAR Open Science Conference, Kuala Lumpur, Malaysia, August 20th – 30th
- 2016 M.R. Siegfried*, D.M. Schroeder, T. Scambos, S.P. Carter, H.A. Fricker, A large, rapid subglacial lake drainage beneath Slessor Glacier, East Antarctica, and its potential impact in the Filchner Trough, IGS International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, La Jolla, July 10th – 15th
- 2016 D.M. Schroeder, C. Grima, M.S. Haynes, J.S. Greenbaum, Distinguishing the Signatures of Ice Shelf Surface Roughness, Basal Roughness, Temperature, and Chemistry in Radar Sounding Data, IGS International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, La Jolla, July 10th – 15th
- 2016 J.S. Greenbaum, D.D. Blankenship, D.M. Schroeder, D. Gwyther, D.A. Young, L.E. Lindzey, J.L. Roberts, R.C. Warner, T. Van Ommen, M.J. Siegert, Basal terraces beneath Totten Glacier, East Antarctica, IGS International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, La Jolla, July 10th – 15th
- 2016 L.E. Lindzey, D.M. Schroeder, J.S. Greenbaum, D.A. Young, D.D. Blankenship, Dielectric losses in Totten Ice Shelf using multiple reflection from ice penetrating radar, IGS International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, La Jolla, July 10th – 15th
- 2016 D.M. Schroeder, H. Seroussi, W. Chu*, D.A. Young, Signature of Recent Ice Flow Acceleration in the Radar Attenuation and Temperature Structure of Thwaites Glacier, West Antarctica, EGU General Assembly, Vienna, Austria, April 17th – 22nd
- 2016 Y.S. Aglyamov*, D.M. Schroeder, M.S. Haynes, S. Vance, An Investigation of Radar Scattering from Fracture in Europa's Upper Ice Shell, Lunar & Planetary Science Conf., The Woodlands, TX, Mar. 21st – 25th
- 2016 M.G.P. Cavitte, D.D. Blankenship, D.A. Young, F. Parrenin, C. Ritz, J.L. Roberts, T. van Ommen, D.M. Schroeder, M.J. Siegert, E. le Meur, Old Ice and the Stability of the Byrd-Totten Glacier Divide Region, International Partnerships in Ice Cores Sciences, Hobart, Australia, March 7th – 11th

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- 2015 D.M. Schroeder, H. Seroussi, Characterizing Englacial and Subglacial Temperature Structure Using Airborne Radar Sounding, AGU Fall Meeting, San Francisco, December 14th – 18th (invited)
- 2015 A. Khazendar, E.J. Rignot, D.M. Schroeder, H.L. Seroussi, M. Schodlok, B. Scheuchl, T.C. Sutterley, I. Velicogna, Direct Observations of Rapid Basal Melting and Bed Topography in the Grounding Zones of the Dotson and Crosson Ice Shelves, West Antarctica, AGU Fall Meeting, San Francisco, December 14th – 18th
- 2015 A. Moussessian, D.D. Blankenship, J. Plaut, G.W. Patterson, Y. Gim, D.M. Schroeder, K.M. Soderlund, D. Young, C. Grima, E. Chapin, REASON for Europa, AGU Fall Meeting, San Francisco, December 14th – 18th
- 2015 M. Haynes, D.M. Schroeder, G. Steinbruegge*, B. Bills, Europa Tide Inversion from REASON Altimetry, AGU Fall Meeting, San Francisco, December 14th – 18th
- 2015 W. Chu*, D.M. Schroeder, H. Seroussi, R. Bell, T. Creyts, Extensive Subglacial Hydrological Network and Basal Temperate Layer in Southwest Greenland: An Integrated Approach of Radar Analysis and Ice Sheet Modeling, AGU Fall Meeting, San Francisco, December 14th – 18th
- 2015 Y. Aglyamov*, D.M. Schroeder, M. Haynes, S. Vance, Significance of Near-Surface Ice Fracture for Radar Sounding of Europa's Ice, AGU Fall Meeting, San Francisco, December 14th – 18th
- 2015 D.M. Schroeder, C. Grima, M. Haynes, Surface and Basal Roughness in Radar Sounding Data: Obstacle and Opportunity, AGU Fall Meeting, San Francisco, December 14th – 18th (invited)
- 2015 C. Grima, D.D. Blankenship, D.M. Schroeder, A. Moussessian, K. Soderlund, Y. Gim, J. Plaut, J. Greenbaum, E.L. Garcia, B. Campbell, N. Putzig, G. Patterson, Understanding Europa's Ice Shell and Subsurface Water Through Terrestrial Analogs for Flyby Radar Sounding, AGU Fall Meeting, San Francisco, Dec. 14th – 18th
- 2015 D.D. Blankenship, C. Grima, D.A. Young, D.M. Schroeder, K. Soderlund, Y. Gim, J. Plaut, G. Patterson, A. Moussessian, Surface and Basal Roughness in Radar Sounding Data: Obstacle and Opportunity, AGU Fall Meeting, San Francisco, December 14th – 18th
- 2015 D.M. Schroeder, M.S. Haynes, G. Steinbruegge*, An Initial Assessment of REASON Altimetry for Europa Geodesy, Europa Gravity Science Working Group, Pasadena, CA, December 6th
- 2015 G.W. Patterson, D.D. Blankenship, K.M. Soderlund, C. Grima, A. Moussessian, J. Plaut, Y. Gim, D.M. Schroeder, E. Chapin, REASON for Europa, AAAS Div. for Planetary Sciences, Wash. DC, Nov. 8th – 13th
- 2015 D.M. Schroeder, Characterizing the Attenuation and Temperature Structure of Thwaites Glacier, West Antarctica, International Symposium on Contemporary Ice-Sheet Dynamics: ocean interaction, meltwater and non-linear effects, Cambridge, UK, August 16th – 21st
- 2015 M.J. Siegert, N. Ross, D.M. Schroeder, et al., Radio Echo Sounding of Active Subglacial Lakes in Institute Ice Stream, West Antarctica, International Symposium on Contemporary Ice-Sheet Dynamics: ocean interaction, meltwater and non-linear effects, Cambridge, UK, August 16th – 21st
- 2015 D. Castelletti*, D.M. Schroeder, S. Hensley, C. Grima, G. Ng, D. Young, Yonggyu Gim, L. Bruzzone, A. Moussessian, D. D. Blankenship, Clutter Detection Using Two-Channel Radar Sounder Data, IEEE Geoscience and Remote Sensing Society, Milan, July 26th – 31st
- 2015 J.S. Greenbaum, D.D. Blankenship, D.A. Young, J.L. Roberts, R.C. Warner, D.M. Schroeder, T. Van Ommen, M.J. Siegert, Controls on the Sabrina Coast grounding line, East Antarctica, International Symposium on Contemporary Ice-Sheet Dynamics: ocean interaction, meltwater and non-linear effects, Cambridge, UK, August 16th – 21st
- 2015 M.G.P. Cavitte, D.D. Blankenship, D.A. Young, D.M. Schroeder, M.J. Siegert, F. Parrenin, E. Le Meur, J. A. MacGregor, Radar Internal Layer Stratigraphic Constraints on the East Antarctic Plateau's Old Ice, International Symposium on Antarctic Earth Sciences, Goa, July 13th – 17th

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- 2015 J.S. Greenbaum, D.D. Blankenship, D.A. Young, T.G. Richter, J.L. Roberts, A.R.A. Aitken, B. Legresy, D.M. Schroeder, R.C. Warner, T.D. van Ommen, M.J. Siegert, Controls on a Costal Marine Ice Sheet Instability Zone Along the Sabrina Coast, East Antarctica, Intl. Sym. on Antarctic Earth Science, Goa, July 13th – 17th
- 2015 E. Quartini, D.D. Blankenship, D.A. Young, D.M. Schroeder, An Evaluation OF Active Subglacial Volcanism as a Source of Thwaites Glacier Heterogeneous Geothermal Flux, International Symposium on Antarctic Earth Sciences, Goa, July 13th – 17th
- 2015 D.D. Blankenship, A. Moussessian, K.M. Soderlund, C. Grima, D.A. Young, D.M. Schroeder, Y. Gim, J.J. Plaut, Revealing Secrets of Europa's Ice Shell, Hidden Water and Plume Activity Through Flyby Radar Sounding, Astrobiology Science Conference, Chicago, June 15th – 19th
- 2015 D.A. Young, D.M. Schroeder, E. Quartini, D.D. Blankenship, The Context for Subglacial Water Systems from Antarctic Airborne Observations, Subglacial Anatarctic lake exploration: first results and future plans, The Royal Society, London, March 30th – 31st
- 2014 D.M. Schroeder, C.Y. Grima, D.D. Blankenship, Characterizing Englacial Attenuation and Grounding Zone Geometry Using Airborne Radar Sounding, AGU Fall Meeting, San Francisco, December 15th - 19th
- 2014 M.J. Siegert, N. Ross, D.M. Schroeder, Channelised Subglacial Hydrology Modulates West Antarctic Ice Stream Basal Conditions and Flow, AGU Fall Meeting, San Francisco, December 15th – 19th
- 2014 T.D. Komacek, D.L. Young, D.M. Schroeder, M.A. VanHecke, Star Formation and Exoplanetary Systems in the National Science Olympiad Astronomy Event for High School Students, American Astronomical Society, DPS meeting #46, November 9th – 14th
- 2014 D.M. Schroeder, Analysis Techniques, Information Content, and Measurement Requirements for Airborne Radar Sounding Data, NASA/NSF Workshop on Instruments for Polar Geology and Geophysics Research, Washington DC, October 9th -10th (invited)
- 2014 D.M. Schroeder, C. Grima, D.D. Blankenship, Characterizing the Location and Extent of the Thwaites Glacier Grounding Zone Using Airborne Radar Sounding, West Antarctic Ice Sheet Workshop, Julian, CA, September 24th – 27th
- 2014 D.A. Young, E. Quartini, E.M. Powell*, D.M. Schroeder, T.G. Richter, D.D. Blankenship, Structure of the Marie Byrd Land crustal province from GIMBLE aerogeophysics, SCAR Open Science Conference, Auckland, New Zealand, August 25th – 28th
- 2014 D.A. Young, D.D. Blankenship, D.M. Schroeder, J.S. Greenbaum, The subglacial environment from remote sensing: key questions and paths forward, SCAR mini symposium on innovation on Antarctic science, Auckland, New Zealand, August 25th – 28th
- 2014 D.M. Schroeder, D.D. Blankenship, D.A. Young, E. Quartini, J.B. Anderson, A.E. Witus, Radar-sounding observations of basal water, sediments and geothermal heat flux, IGS Symposium on the Contribution of Glaciers and Ice Sheets to Sea-Level Change, Chamonix, France, May 26th – 30th
- 2014 D.D. Blankenship, D.M. Schroeder. Airborne Studies of Subglacial Boundaries in West Antarctica, International Symposium on Polar Sciences, Incheon, South Korea, May 27th – 29th
- 2014 D.D. Blankenship, A. Moussessian, D.M. Schroeder, K.M. Soderlund, C.Grima, Y. Gim, J.J. Plaut, B.E. Schmidt. Flyby Sounding of Europa's Icy Shell: Radar Investigations, Analogs, and Instruments for the Europa Clipper Mission, Workshop on the Habitability of Icy Worlds, Pasadena, CA, February 5th – 7th
- 2014 C. Grima, D.M. Schroeder, D.D. Blankenship, D.A. Young. Europa Landing Site Selection Supported by Ice Penetrating Radar, Workshop on the Habitability of Icy Worlds, Pasadena, CA, February 5th – 7th

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- 2014 D.M. Schroeder, C.B. Burch*, K.M. Soderlund, C. Grima, D.D. Blankenship, T.D. Komacek, T.M. Quinn, M.A. Van Hecke, B.E. Schmidt, G.W. Patterson, J.J. Plaut. Icy World Science and Habitability in the National Science Olympiad for Middle School Students, Workshop on the Habitability of Icy Worlds, Pasadena, CA, February 5th – 7th
- 2013 D.M. Schroeder, D.D. Blankenship, D.A. Young. Quantifying Bedform Geometry, Water Configuration, and Melt Rate Beneath Thwaites Glacier from Radar Scattering Functions. AGU Fall Meeting, San Francisco, CA, December 9th – 13th
- 2013 C. Grima, D.M. Schroeder, D.D. Blankenship, D.A. Young. Planetary Surface Roughness Derived from Ice Penetrating Radar Data: Method and Concept Validation in Antarctica. AGU Fall Meeting, San Francisco, CA, December 9th – 13th
- 2013 C. Cura*, E. Arnold*, B. Karwoski*, C. Grima, D.M. Schroeder, D.A. Young, D.D. Blankenship. Enhancing Europa Surface Characterization with Ice Penetrating Radar: A Comparative Study in Antarctica. AGU Fall Meeting, San Francisco, December 9th – 13th
- 2013 D.M. Schroeder, D.D. Blankenship, D.A. Young. What Can Radar Scattering Tell Us About Past and Future Retreats in the Amundsen Sea Embayment? WAIS Workshop, Sterling, VA, September 29th – October 2nd
- 2013 A.E. Kirshner, C.M. Braneky, J.B. Anderson, W. Szczucinski, D.M. Schroeder, D.D. Blankenship, M. Jakobsson. The Sedimentary Record of Meltwater Intensive Glacial Erosion in Pine Island Bay, West Antarctica and Implications for Glacial Dynamics, WAIS Workshop, Sterling, VA, Sept. 29th – Oct. 2nd
- 2013 D.M. Schroeder, D.D. Blankenship, R.K. Raney, D.A. Young. Buried Information: Constraining Bed Geometry and Material from the Doppler-Dependent Radar-Scattering Function. International Symposium on Radioglaciology, Lawrence, September 9th – 13th
- 2013 D.D. Blankenship, B.E. Schmidt, D.M. Schroeder, K.M. Soderlund, C. Grima. Flyby Sounding of Europa's Icy Shell: Radar Investigations, Analogs and Instruments for the Europa Clipper Mission, IGS International Symposium on Radioglaciology, Lawrence, KS, September 9th – 13th
- 2013 C. Grima, D.M. Schroeder, D.D. Blankenship, D.A. Young. Firn Variability Derived from a Statistical Analysis of Airborne Ice-Penetrating Radar Over the Thwaites Glacier Catchment, West Antarctica, IGS International Symposium on Radioglaciology, Lawrence, KS, September 9th – 13th
- 2013 M.G.P. Cavitte, D.D. Blankenship, D.A. Young, D.M. Schroeder, M.J. Siegert, E. LeMeur. Extending East Antarctic Ice-Core Chronology with Radar Layer Stratigraphy. IGS International Symposium on Radioglaciology, Lawrence, KS, September 9th – 13th
- 2013 D.M. Schroeder, D.D. Blankenship, D.A. Young. Beyond Intensity and Depth: Geophysical Glaciology with Higher Order Information from Radio Echo Sounding, Radio Echo Sounding Layer Tracing Workshop, Copenhagen, DK, May 6th – 10th
- 2013 C. Grima, D.M. Schroeder, D.D. Blankenship. Identifying Surface Characteristics Using an Ice Penetrating Radar Sounder at Europa: Potential for Landing Site Selection, Lunar and Planetary Science Conference, The Woodlands, TX, March 18th – 22nd
- 2012 D.M. Schroeder, D.D. Blankenship, D.A. Young, E.M. Powell. Configuration of Subglacial Water and Sediments Beneath Thwaites Glacier, West Antarctica: Context for a Potential Basal-Water-Triggered Grounding-Line-Retreat. AGU Fall Meeting, San Francisco, CA, December 3rd – 9th
- 2012 B.E. Schmidt, D.D. Blankenship, D.M. Schroeder. Europa Subsurface Science from Mutli-Flyby Missions, European Planetary Science Congress, Madrid, September 23rd – 28th
- 2012 D.M. Schroeder, D.B. Blankenship, D.A. Young. Evidence for Ice-Flow-Coupled Subglacial Water Systems Beneath West Antarctica's Potentially Unstable Thwaites Glacier, West Antarctic Ice Sheet Workshop, Eatonville, WA, September 19th – 22nd

Schroeder C.V. May 2020

- 2012 D.A. Young, J.L. Roberts, A.P. Wright, J.S. Greenbaum, S.D. Kempf, G. Ng, T.G. Richter, J.W. Holt, E. Le Meur, D.M. Schroeder, R.C. Warner, N.W. Young, D.D. Blankenship, M.J. Siegert, T. Van Ommen. ICECAP Data Over the Periphery of East Antarctica: A New View of a Crucial Ice Sheet, SCAR Open Science Conference, Portland, OR, July 13th – 25th
- 2012 D.M. Schroeder, D.D. Blankenship, D.A. Young. Remote Sensing of Subglacial Water Networks with Ice Penetrating Radar, Chapman Conf. on Remote Sensing of Terrestrial Water Cycle, Kona, HI, Feb 19th – 22nd
- 2011 D.M. Schroeder, D.D. Blankenship, D.A. Young. Interpretation of Sub-resolution Bedform and Subglacial Hydrologic Network Geometries from Radar Echo Specularity: Application to Thwaites Glacier, West Antarctica, AGU Fall Meeting, San Francisco, CA, December 5th – 9th (invited)
- 2011 A.M. Baker, D.M. Schroeder, M. Van Hecke. Bringing Field Science to a High School Audience: Connecting to the Next Generation of Scientific Minds through Science Olympiad, American Geophysical Union Fall Meeting, San Francisco, December 5th – 9th
- 2011 D. D. Blankenship, B. E. Schmidt, D. A. Young, D.M. Schroeder, J.S. Greenbaum. The Search for a Habitable Europa: Radar, Water, and an Active Ice Shell, EPSC-DPS Joint Meeting, October 2nd – 7th
- 2011 D.A. Young, D.M. Schroeder, D.D. Blankenship, C.S. Jackson, M.J. Siegert, A.P. Wright, J.L. Roberts, R.C. Warner, T. van Ommen, N.W. Young. Under the Antarctic Ice: New Data in the East, New Approaches in the West, WAIS Workshop, Loveland, CO, September 21st – 23rd
- 2011 D.M. Schroeder, D.D. Blankenship, D.A. Young. The Basal Boundary of the Thwaites Glacier Catchment: Characterizing and Anisotropic Hydrological Environment, International Symposium on Antarctic Earth Science, Edinburgh, UK, July 10th – 16th
- 2010 D.M. Schroeder, D.D. Blankenship, D.A. Young. Basal Specularity of Thwaites Glacier, West Antarctica: Results from a New Tool for Evaluating Subglacial Hydrology, West Antarctic Ice Sheet Workshop, Raystown, PA, September 23rd – 25th
- 2010 D.M. Schroeder, D.D. Blankenship, D.A. Young. The Subglacial Hydrology of Thwaites Glacier: Characterization and Interpretation of a Basin-Scale Specularity Map, SCAR Open Science Conference, Buenos Aires, Argentina, August 3rd – 6th
- 2010 D.A. Young, D.D. Blankenship, M.J. Siegert, T. Van Ommen, A.P. Wright, J.L. Roberts, J.S. Greenbaum, B.C. Frederick, D.M. Schroeder, J.W. Holt, R.C. Warner, N.W. Young. Extent, geomorphology and geophysics of the Aurora and Wilkes Subglacial Basins, East Antarctica: Influences on ice sheet architecture, SCAR Open Science Conference, Buenos Aires, Argentina, August 3rd – 6th
- 2010 A.P. Wright, M.J. Siegert, D.A. Young, D.D. Blankenship, T. Van Ommen, J.L. Roberts, J.S. Greenbaum, B.C. Fredrick, D.M. Schroeder, J.W. Holt, R.C. Warner, N.W. Young. Subglacial hydrology of the Aurora Basin, East Antarctica, from the geophysical investigations of the ICECAP project, SCAR Open Science Conference, Buenos Aires, Argentina, August 3rd – 6th
- 2010 J.W. Holt, D.A. Young, D.D. Blankenship, J.S. Greenbaum, D.M. Schroeder, T.G. Richter, A.P. Wright, T. Van Ommen, M.J. Siegert, J.L. Roberts, R.C. Warner. Bed topography of the Byrd Glacier trunk from radar soundings of the ICECAP project, SCAR Open Science Conf., Buenos Aires, Argentina, August 3rd – 6th
- 2010 D.M. Schroeder, D.D. Blankenship, D.A. Young. Comparative Subglacial Hydrology of Thwaites Glacier, Using Basal Specularity, Chapman Conference, Exploration and Study of Antarctic Subglacial Aquatic Systems, Baltimore, MD, March 15th – 17th
- 2009 D.M. Schroeder, D.D. Blankenship, D.A. Young. Improved Characterization of Subglacial Hydrology Using Multiple Radar Focusing Windows: Examples from Thwaites Glacier, West Antarctica, First Antarctic Climate Evolution Symposium, Granada, Spain, September 7th – 11th

SPACECRAFT MISSION PARTICIPATION

- 2020 – present Co-Chair, Interiors Working Group, Europa Clipper Mission, NASA
- 2016 – present Science Team Member, Mini-RF Radar, Lunar Reconnaissance Orbiter, NASA
- 2015 - present Science Team Member, REASON Radar Sounder, Europa Clipper mission, NASA
- 2015 – present Member, Technical Management Team, REASON Radar Sounder, Europa Clipper mission, NASA
- 2015 – present Lead, Sounding Measurement Implementation Group, REASON, Europa Clipper, NASA
- 2015 – present Lead, Altimetry Measurement Implementation Group, REASON, Europa Clipper, NASA
- 2015 – 2020 Member, Interiors Working Group, Europa Clipper Mission, NASA
- 2015 - 2017 Lead, Passive Sounding Working Group, RIME Radar Sounder, JUICE mission, ESA
- 2013 – 2014 Technical Assistant, Europa Assessment Group, NASA
- 2010 – 2012 Technical Assistant, Europa Science Definition Team, NASA

FIELD CAMPAIGN PARTICIPATION

- 2019 - present Co-I with Students on Field Team, TIME, Thwaites Glacier, West Antarctica (~1 Month/Yr)
- 2019 - present Collaborator with Students on Field Team, Svalbard Collaboration (~1 Month/Yr)
- 2018 - 2019 Collaborator with Students on Field Team, RESPONDER, Store Glacier, Greenland (~1 Month/Yr)
- 2008 – 2011 RF Engineer and Radar Operator, ICECAP & Operation Ice Bridge, East Antarctica (~3 Month/Yr)

GRANTS

- 2015 – 2033 Co-I, Science Team Member, Radar for Europa Assessment and Sounding: Ocean to Near Surface (REASON), Europa Clipper Mission, NASA
- 2020 – 2023 PI, Quantitatively Remastering Archival Radar Film to Enable Multi-Decadal Investigation of the Subsurface Evolution of the Greenland Ice Sheet, Heising-Simons Foundation
- 2020 – 2023 Collaborator, Exploration of Saline Cryospheric Habitats with Europa Relevance (ESCHER): An approach using airborne and submarine semiautonomous systems, NASA PSTAR
- 2018 – 2023 PI, CAREER: Cross-Instrument Synthesis of Antarctic Radar Sounding Observations, NSF
- 2016 – 2023 Co-I, Mini-RF Radar, Lunar Reconnaissance Orbiter, NASA
- 2018 – 2022 Co-I, TIME (Thwaites Interdisciplinary Margin Evolution) - The Role of Shear Margin Dynamics in the Future Evolution of Thwaites Drainage Basin, NSF-NERC
- 2019 – 2020 PI, Digitizing Archival Radar Observations of the Greenland Ice Sheet from Film Records, Stanford Woods Institute
- 2018 – 2020 Co-I, Ground-based Radar Monitoring of Plant Water Content, Stanford Woods Institute
- 2018 - 2020 Co-I, Hardware Prototype for Passive Sounding of the Moon and Solar System Objects, JPL
- 2017 – 2020 Collaborator, REsolving Subglacial Properties, hydrOlogical Networks and Dynamic Evolution of ice flow on the gReenland ice sheet (RESPONDER), European Commission
- 2016 – 2020 PI, Joint Radar and Model Investigations of Greenland Basal Water Conditions, NASA
- 2019 PI, IGS 2019: 50 Years of Radioglaciology, NASA & NSF
- 2017 – 2018 Co-I, Passive Sounding using Astronomical Radio Sources for Earth and Planetary Science, JPL
- 2017 Co-I, Glacier Velocity on Mt. Baker, Washington, MUIR Award, Stanford Woods Institute
- 2015 – 2016 Co-I, Radar Sounding and Propagation through Heterogeneous Media, JPL
- 2014 – 2015 PI, Technique Development for Grounding Zone Characterization Using Radar Sounding, NASA
- 2013 – 2014 Key Personnel, Ice Penetrating Radar, NASA Instrument Concepts for Europa Exploration
- 2009 - 2014 PI, NSF Graduate Research Fellowship Program

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PROFESSIONAL SERVICE

Leadership

2019 – present Scientific Editor, Journal of Glaciology
2019 – present Council Member, International Glaciological Society
2019 – present Technical Committee Member, Instruments and Future Technologies Committee, IEEE GRSS
2016 – present Steering Committee, Solid Earth Response and Influence on Cryosphere Evolution, SCAR
2020 Session Chair, IEEE Geoscience and Remote Sensing Symposium
2020 Scientific Committee Member, IEEE Geoscience and Remote Sensing Symposium
2020 Session Lead Convener, Scientific Committee on Antarctic Research, Hobart
2020 Session Co-Convener, Scientific Committee on Antarctic Research, Hobart
2019 Chair, IGS Symposium Scientific and Organizing Committee, Stanford
2019 Associate Chief Editor, Annals of Glaciology Volume on Progress in Radioglaciology
2019 Scientific Committee Member, IEEE Geoscience and Remote Sensing Symposium
2018 AGU Cryosphere Session Convener
2018 AGU Planetary Session Convener
2018 Convener, Invited Session, IEEE Geoscience and Remote Sensing Symposium, Valencia
2017 AGU Planetary Session Convener
2016 AGU Planetary Session Convener
2015 AGU Planetary Session Convener

Panel Participation

Australian Antarctic Science Program, German Research Foundation, NASA Cassini Data Analysis and Participating Scientist, NASA Cryospheric Sciences, NASA Development and Advancement of Lunar Instruments, NASA Earth Sciences Fellowship Program, NASA Earth Science Technology Office Advanced Information Systems Technology Program, NASA Lunar Surface Instrument and Technology Payloads, NASA Maturation of Instruments for Solar System Exploration, NASA Operation Ice Bridge, NASA Planetary Fellowship Program, NASA Planetary Instrument Concepts for Advancement of Solar System Observations, NASA Science Mission Directorate, NASA Solar System Workings, Natural Environment Research Council Standard Grants UK, NSF Major Research Instrumentation, NSF Science and Technology Center, NSF Section for Arctic Sciences, University of Missouri

Reviewer

Annals of Geophysics, Annals of Glaciology, Cold Regions Science and Technology, Earth and Planetary Science Letters, Earth System Science Data, Geological Society of London, Geophysical Research Letters, Geophysics, Geosciences, Icarus, IEEE Geoscience and Remote Sensing Letters, IEEE Geoscience and Remote Sensing Magazine, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, IEEE Transactions on Aerospace and Electronic Systems, , IEEE Transactions on Geoscience and Remote Sensing, Journal of Geophysical Research: Earth Surface, Journal of Glaciology, Nature, Nature Astronomy, Nature Geoscience, Philosophical Transactions of the Royal Society, Planetary and Space Science, Radio Science, Remote Sensing, Science, The Cryosphere

Professional Affiliations

Member, American Geophysical Union
Member, European Geosciences Union
Senior Member, IEEE Geoscience and Remote Sensing Society
Senior Member, IEEE Antennas and Propagation Society

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Member, International Association of Cryospheric Scientists
Member, International Glaciological Society
Member, Society of Exploration Geophysicists

INSTITUTIONAL SERVICE

2020 – present Steering Committee, Faculty Senate, Stanford University
2019 – present Undergraduate Advisory Council, Stanford University
2019 – present Course Design Team, Stanford Undergraduate Shared First Year Experience
2018 – present Faculty Senator, Stanford University
2018 – present Earth Counsel Delegate, School of Earth, Energy, and Environmental Sciences, Stanford University
2017 – present Academic Affairs Committee Chair, Department of Geophysics, Stanford University
2017 – present Director of Undergraduate Studies, Department of Geophysics, Stanford University
2017 – present Admissions Committee, Information Systems & Science, Electrical Engineering, Stanford University
2016 – present Pre-Major Advisor / Newcomer Guide, Stanford University
2020 Respectful Workplace Committee, School of Earth, Energy, and Env. Sciences, Stanford University
2019 – 2020 Committee on Committees, Faculty Senate, Stanford University
2019 Diversity Lead, Writing Team for Geophysics Department Visiting Committee, Stanford University
2017 – 2018 Graduate Admissions Committee, Department of Geophysics, Stanford University
2018 Reviewer, Stanford Interdisciplinary Graduate Fellowship
2016 – 2017 Undergraduate Coordinator, Department of Geophysics, Stanford University
2017 Undergraduate Program Team, Stanford School of Earth, Energy, and Environmental Sciences
2017 Reviewer, Stanford Interdisciplinary Graduate Fellowship
2016 – 2017 Atmospheric Dynamics Search Committee, Earth Systems Science Department, Stanford University
2014 – 2015 Member, JPL Advisory Council for Women
2014 – 2015 Division Representative, JPL Early Career Core Committee

TEACHING

2020 Introduction to the Foundations of Contemporary Geophysics, Stanford University
2020 Ice Penetrating Radar, Stanford University
2019 Frontiers of Geophysical Research at Stanford
2019 Want to be an Engineer? (Guest Lecturer)
2019 Introduction to the Foundations of Contemporary Geophysics, Stanford University
2018 Mission to Europa, Stanford University
2018 Frontiers of Geophysical Research at Stanford
2018 Ice Penetrating Radar, Stanford University
2018 Know Your Planet: Big Earth, Stanford University (Guest Lecturer)
2017 Near Surface Geophysics and Hydrogeophysics, Stanford University
2017 Know Your Planet: Big Earth, Stanford University (Guest Lecturer)
2016 Introduction to the Foundations of Contemporary Geophysics, Stanford University
2016 Digital Image Processing, Stanford University (Guest Lecturer)
2016 Climate Physics, Bucknell University (Guest Lecturer)
2015 Remote Sensing, University of California, Los Angeles (Guest Lecturer)
2013 The Cryosphere, Rice University (Guest Lecturer)
2013 Geophysical Glaciology: Ice Penetrating Radar, University of Texas Institute for Geophysics

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2010 Radar Principles Short Course, University of Texas Institute for Geophysics

Postdoctoral Scholar Advising

2019 – present Gregor Steinbrügge, Stanford University, Geophysics
2017 – 2020 Winnie Chu, Stanford University, Geophysics (Asst. Prof. at GaTech starting 2020)
2017 – 2019 Tom Jordan, Stanford University, Geophysics, Now: Postdoctoral Fellow, University of Bristol
2017 – 2019 Elisa Mantelli, Stanford, Geophysics, Now: Postdoc Princeton (Asst. Prof. U. Tasmania 2021)
2017 – 2018 Davide Castelletti, Stanford University, Geophysics, Now: SAR Specialist, Capella Space
2017 – 2018 Matthew Siegfried, Stanford University, Geophysics, Now: Asst. Professor at CO School of Mines
2015 – 2016 Klara Kalousova, Jet Propulsion Laboratory, Planetary, Now: Asst. Professor at Charles University

Graduate Student Advising

2020 - present Thomas Teisberg, Stanford University, Electrical Engineering
2019 - present Anna Broome, Stanford University, Electrical Engineering
2018 – present Nicole Bienert, Stanford University, Electrical Engineering
2018 – present Eliza Dawson, Stanford University, Geophysics
2018 – present Riley Culberg, Stanford University, Electrical Engineering
2017 – present Emma (Mickey) MacKie, Stanford University, Geophysics
2016 – 2020 Sean Peters, Stanford University, Electrical Engineering
2016 – 2018 Andrew Hilger, Stanford University, M.S. Electrical Engineering, Sandia National Labs, Now: Zoox

“Second-Project” Graduate Student Advising

2017 – present Paul Summers, Stanford University, Geophysics
2018 – 2019 Alexander Miltenberger, Stanford University, Geophysics
2016 – 2019 Cansu Culha, Stanford University, Geophysics
2016 – 2019 Cooper Elsworth, Stanford University, Geophysics, Now: Descartes Labs
2016 – 2019 Roger Michaelides, Stanford University, Geophysics, Now: Postdoc at Colorado School of Mines
2016 – 2018 Alexander Kendrick, Stanford University, Geophysics

Visiting Graduate Student Mentorship

2018 – 2019 Oliver Bartlet, University of Exeter, Geography
2018 – 2019 Richard Delft, University of Edinburgh, Geography, Now: Orbital Microsystems
2017 – 2018 Michael Cooper, University of Bristol, Geography, Now Postdoc at the University of York
2017 – 2018 Leonardo Carrer, University of Trento, Electrical Engineering, Now: Research Fellow U. Trento
2017 Corinne Benedek, University of Cambridge, Geography
2016 – 2017 T.J. Young, University of Cambridge, Geography, Now: Postdoc at Cambridge
2015 – 2017 Gregor Steinbruegge, Technical University of Berlin, Planetary Science, Now: Postdoc at Stanford
2015 – 2017 Winnie Chu, Columbia, Geophysics, Now: Postdoc at Stanford (Asst. Prof. at GaTech starting 2020)
2014 – 2017 Davide Castelletti, University of Trento, Electrical Engineering, Now: Capella Space

Undergraduate Student Mentorship

2020 – present Akua McLeod, Stanford University, Electrical Engineering
2020 – present Olivia Flournoy, Stanford University, Geophysics
2020 – present Dustin Smith, Stanford University, Earth Systems
2020 – present JP Spaventa, Stanford University, Geophysics

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2019 - present Annabel Conger, Stanford University, Geophysics
2019 – present Martin Altenberg, Stanford University, Electrical Engineering
2019 – present Sara Davidova, Stanford University, Electrical Engineering
2018 – present Michaela Murray, Stanford University, Computer Science
2018 – present Ha Tran, Stanford University, Undeclared
2019 Jasmine Jones, Stanford University, Electrical Engineering
2019 Connery Wood, Stanford University, Physics
2019 Jon Bessette, SUNY Buffalo, Mechanical Engineering, Now: Ph.D. Student in Mech.E. at MIT
2018 – 2019 Isabella Pena, Fullerton College and UC Berkeley, Physics
2018 – 2019 Sydney Marler, Stanford University, Electrical Engineering and Computers Science
2018 – 2019 Madison Goldberg, Harvard College, Earth and Planetary Sciences
2018 – 2019 Andrew Pollack, Stanford University, Computer Science
2017 – 2018 Kai Marshland, Stanford University, Electrical Engineering, Now: Windborne Systems
2017 – 2018 Meera Radhakrishnan, Stanford University, Electrical Engineering, Now: Microsoft
2017 – 2018 Stephen Spears, Stanford University, Electrical Engineering, Now: Astranis
2017 – 2018 Kathy Vega, Fullerton College and Univ. of Colorado, Engineering Physics, Now: Ball Aerospace
2016 – 2018 Nikita Darbar, Stanford University, Chemical Engineering, Now: Bain & Co.
2016 – 2018 Theo Diamandis, Stanford University, Electrical Engineering, Now: Ph.D. Student in EE at MIT
2016 – 2018 Logan Herrera, Stanford University, Electrical Engineering, Now: Red Leader Tech
2016 – 2018 Thomas Teisberg, Stanford University, EE, Now: Ph.D. Student in Electrical Engineering, Stanford
2016 – 2018 Aria Tedjarati, Stanford University, Electrical Engineering, Now: Joby Aviation
2016 – 2017 Paige Brown, Stanford University, Material Science & Engineering: Now: Windborne Systems
2016 - 2017 Joan Creus-Costa, Stanford University, Electrical Engineering
2016 – 2017 Jake Hillard, Stanford University, Electrical Engineering, Now: Red Leader Tech
2016 – 2017 Iskender Kushan, Stanford University, Electrical Engineering, Now: Microsoft
2016 – 2017 Sasha Maldonado, Stanford University, Electrical Engineering, Now: Zipline
2017 Allen Holster, Stanford University, Electrical Engineering, Now: Oracle
2017 Ryan Kirk, Stanford University, Mechanical Engineering
2017 Kat McNeill, Stanford University, Earth Systems
2017 Kirill Safin, Stanford University, Electrical Engineering, Now: ABL Space Systems
2017 Adam Stanford-Moore, Stanford University, Physics
2016 Valarie Sarge, Massachusetts Institute of Technology, Electrical Engineering, Now: Nvidia
2013 – 2016 Youry Agylamov, CalTech, Now: Ph.D. Student in Astronomy at Cornell
2013 – 2014 Ben Ayton, University of Texas, Now: Ph.D. Student in Aerospace Engineering at MIT
2012 Leo Breston, University of Illinois, Now: Ph.D. Student in Neuroscience at UCSD
2012 Harris Davidson, Olin College, Mechanical Engineering, Now: Instacart
2010 – 2014 Evelyn Powell, University of Texas, Now: Ph.D. Student in Geophysics at Harvard
2011 – 2014 Arami Rosales, University of Texas, Physics
2008 – 2013 John DeSanto, University of Texas, Ph.D. Geophysics UCSD, Now: Postdoc U. Washington

Honors Awarded to Supervised Students

2020 Sean Peters, Dissertation Fellow, Ford Foundation
2020 Emma MacKie, ARCS Award, ARCS Foundation
2020 Alex Kendrick, Top 10% Most Downloaded Papers, GRL

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2019	Anna Broome, Winner, AGU Outstanding Student Presentation Award
2019	Riley Culberg, Winner, WAIS Workshop Best Student Poster
2019	Sean Peters, 2 nd Place, IGARSS Best Student Paper
2019	Maddie Goldberg, Winner, IGS Symposium Best Student Poster
2019	Riley Culberg, Winner, IGS Symposium Best Student Presentation
2019	Mickey MacKie, Winner, IGS Symposium Best Student Presentation
2019	Nicole Beinert, Fellow, NSF GRFP
2019	Anna Broome, Fellow, NDSEG
2019	Riley Culberg, Fellow, NDSEG
2018	Sean Peters, Fellow, Diversifying Academia Recruiting Excellence (DARE) Program
2018	Mickey MacKie, Winner, AGU Cryosphere Section Flash Freeze Competition
2018	Eliza Dawson, Fellow, NSF GRFP
2017	Sean Peters, Winner, AGU Cryosphere Section Flash Freeze Competition
2016	Sean Peters, Fellow, NSF GRFP

Dissertation Committee Membership

2019 - present	Rustam Akhmadiev, Stanford University, Geophysics
2019 - present	Krishna Rao, Stanford University, Earth System Science
2019- present	Andrew Hennig, Stanford University, Earth System Science
2016 – present	Cansu Culha, Stanford University, Geophysics
2016 – present	Alex Kendrick, Stanford University, Geophysics
2016 – 2020	Roger Michaelides, Stanford University, Geophysics
2016 – 2019	Yujie Zheng, Stanford University, Geophysics
2016 – 2019	Cooper Elsworth, Stanford University, Geophysics
2019	Kate Lewis, Stanford University, Earth System Science
2019	Miyuki Hino, Stanford University Emmett Interdisciplinary Program in Environment & Resources
2019	Joe DeRose, Stanford University, Physics
2019	Taylor Dahlke, Stanford University, Geophysics
2019	Jonathan Goh, Stanford University, Mechanical Engineering
2019	Greg McCracken, Stanford University, Physics
2018	Danielle Touma, Stanford University, Earth Systems Science
2018	Julio Hoffmann Mendes, Stanford University, Energy Resources Engineering
2018	Ryan Smith, Stanford University, Geophysics
2018	Enrica Quartini, University of Texas, Geophysics
2017	Nattavadee Srisutthiyakorn, Stanford University, Geophysics
2017	Ben Hockman, Stanford University, Mechanical Engineering
2017	Priyanka Dutta, Stanford University, Geophysics
2016	Emily Fay, Stanford University, Geophysics
2016	Sam Johnstone, Stanford University, Geology
2016	Michael Tsiang, Stanford University, Earth System Science

High School Student Science Team Coaching and Research Mentorship

2017 – present	Michelle Park, Solon
2013 - 2016	Rebekah Albach, LASA, B.S. Studying Earth Science at Wellesley College

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2013 – 2016 Claire Burch, Mira Loma, A.B. Studying Astrophysics at Harvard University

2012 – 2016 Neil Patil, LASA, B.S. Computer Science, University of Texas, Now: Helping Hands Community

2012 – 2016 Isaree Pitaktong, LASA, B.S. Studying Biomedical Engineering at John Hopkins, Now: BioSwift

2012 – 2016 Zennie Wey, LASA, B.S. Biology at Harvard University, Now: Amazon

2016 Kelyn Wood, Mountain View, Now: Studying Mechanical Engineering at Stanford University

2012 – 2015 Elena Arnold, LASA, B.S. Computer Science at the University of Texas at Austin

2012 – 2015 Cassidy Curra, LASA, B.A English at Lewis and Clark College

2012 – 2015 Sam Grayson, LASA, B.S. Computer Science at UTDallas, Now: Ph.D. Student in CS. at U.Illinois

2012 – 2015 Blake Karwoski, LASA, Mechanical Eng. at Texas A&M, Now: M.S. Student in Robotics at U.Mich.

2012 – 2015 Nha Nguyen, LASA, B.S. Physics and Mechanical Engineering at MIT, Now: XYZ Robotics

2013 – 2015 Dhruv Puri, LASA, , B.S. Biology and Computer Science at UC Berkeley, Now: WHO

2012 – 2015, Evan Tey, LASA, B.S. Computer Science and Physics at MIT

2013 – 2015 Lily Xu, LASA, A.B. Biology at Harvard University, Now: Clearview Health Partners

2012 – 2014 Advait Anand, LASA, B.S. Computer Science at MIT, Now: Palantir

2012 – 2014 Ying Liu, LASA, B.S. Computer Science at Cambridge University

2012 – 2014 Jessica Wang, LASA , A.B. Computer Science at Harvard University, Now: Facebook

2010 – 2013 Youry Agylamov, LASA, B.S. Geophysics, CalTech, Now: PhD. Student in Astronomy at Cornell

2011 – 2013 Miranda Donellan, LASA, B.A. Cornell College

2011 – 2013 Arthur Lee, LASA, B.S. Biology, U.Texas, Now: PhD Student in History at Johns Hopkins

2011 – 2013 Tim Loose, LASA, B.S. Chemistry, U.Texas, Now: PhD Student in Chemistry at the U. Chicago

2011 – 2013 Marci McClenon, LASA, B.A Biology at Beloit College, Now: Company.com

2010 – 2013 Allan Sadun, LASA, B.S.&M.S. EE at MIT, Now: LeafLabs

2010 – 2012 Leo Breston, LASA, B.S. Physics, Illinois, Now: PhD. Student in Neurosciences at UCSD

2010 – 2012 Harris Davidson, LASA, BS. Olin College, Mechanical Engineering, Now: Wayfair

2010 – 2012 Calvin Ling, LASA, B.S. Mgmt Science and Engineering, Stanford University, Now: Prefix Capital

2009 – 2012 Mark Sands, LASA, B.A. Economics, University of Chicago, Now: Susquehanna International Group

2010 – 2012 Christopher Wang, LASA, B.S. Math and Economics, Columbia University

2010 – 2012 Daniel Wang, LASA, B.S. Mathematics, MIT, Now: Law Student at Harvard

2010 – 2012 Max Zern, LASA, B.S. Biology at Washington University in St. Louis

2009 – 2011 Victoria Cui, LASA, B.S., Bio/Econ, Columbia, M.D. Wash U. St. Louis, Now: Georgetown Hospital

2009 – 2011 Jeffery Holzgrafe, LASA, B.S. Olin, Marshall Scholar Camb., Now: Ph.D Student Physics Harvard

2009 – 2011 Chloe Ling, LASA, , B.S., Physics, CalTech, Now: MIT Lincoln Lab

2009 – 2011 Angela Liu, LASA, B.S., Biology, Yale University, Now: ClearView Healthcare Partners

2008 – 2010 Eliza McDonald, LASA, B.S., Astrophysics, UC Berkeley

2008 – 2010 Rose Kent, LASA, B.A., Biochemistry, Oregon, Now: W.R. Grace

2008 – 2010 Travis Owen, LASA, B.A., Finance, New York University, Now: Capital Group

2008 – 2011 Arami Rosales, LASA, B.S. Physics, University of Texas

2008 – 2009 Ryan Doubrava, LASA, , B.A., Classics, University of Texas at Austin

2008 – 2009 Jonathan Hillis, LASA, B.A. Environmental Science, Carleton College, Now: Instacart

2008 – 2009 Frasier Liljestrand, LASA, B.S. Geology, Rice, Now: Ph.D. Student in Geochemistry at Harvard

2008 – 2009 Evelyn Powell, LASA, B.S. Physics Texas, Now: Ph.D. Student in Geophysics at Harvard University

2008 – 2009 Andrew Vanderberg, LASA, B.S. Berkeley, Ph.D. Astronomy, Harvard, Now: Asst. Prof at U. Wisc.

OUTREACH

- 2019 – present Member, National Arbitration Committee, National Science Olympiad
- 2019 – present Faculty Advisor, Adopt a Science Olympiad Team, Stanford Student Organization
- 2016 – present Faculty Advisor, Stanford-Berkeley Science Olympiad Invitational
- 2014 – present Chair, Earth and Space Science Committee, National Science Olympiad
- 2003 – present Member, Earth and Space Science Committee, National Science Olympiad
- 2003 – 2019 6th-12th Grade Astronomy and Planetary Science National Event Supervisor, Science Olympiad
- 2020 Speaker, Golden Gate Science Olympiad Invitational, Berkeley, CA
- 2019 Speaker, Golden Gate Science Olympiad Invitational, Berkeley, CA
- 2019 Speaker, Stanford Summer Research Program for Teachers Seminar
- 2019 Speaker, Boynton Continuation High School, San Jose, CA
- 2018 Speaker, Stanford Summer Engineering Academy
- 2018 Keynote Speaker, Generation Sci, Stanford University
- 2018 Speaker, Hopkins Marine Station, Monterey, CA
- 2018 Panelist, One Strange Rock Screening, The Exploratorium, San Francisco, CA
- 2018 Speaker, BEAM Career Seminar, Stanford University
- 2018 Speaker, Golden Gate Science Olympiad Invitational, Berkeley, CA
- 2017 Panelist, Uncommon Dialogues: Coastal Resilience, Woods Institute for the Environment
- 2017 Speaker, Classes Without Quizzes, Stanford Homecoming
- 2017 Speaker, Stanford Summer Research Program for Teachers Seminar
- 2017 Speaker, Stanford Summer Undergraduate Research Program Seminar
- 2017 Presenter, TEDx, Stanford University
- 2017 Speaker, Golden Gate Science Olympiad Invitational, Berkeley, CA
- 2017 Presenter, Stanford Continuing Studies, Public Seminar
- 2017 Panelist, The Frontiers of Earth Science, Stanford University Parents Weekend
- 2017 Speaker, Stanford Earth Matters San Francisco
- 2016 Speaker, STEM Career Day, Mountain View High School, Mountain View, CA
- 2016 Speaker, Society of Physics Students Seminar, Massachusetts Institute of Technology
- 2016 Engaging with Faculty Speaker, New Student Orientation, Stanford University
- 2016 Presenter, Northern California Science Olympiad Coaches Clinic
- 2015 Keynote Speaker, MIT Science Olympiad Invitational
- 2015 Presenter, Caltech Science Olympiad Coaches Clinic
- 2015 Interviewee, The Blue Dot Report, North State Public Radio
- 2015 High School Astronomy State Event Supervisor, Southern California Science Olympiad
- 2014 Guest Speaker, Lakeway Men's Breakfast, Lakeway, TX
- 2007 – 2014 Volunteer Science Coach, Liberal Arts and Sciences Academy, Austin, TX
- 2011 Onboard Science Lecture, Aurora Australis AAD Voyage: Casey to Hobart
- 2010 Guest Speaker, University United Methodist Church, Austin, TX
- 2010 Guest Speaker, Solon High School, Solon, OH
- 2010 Tejas Club Life Raft Debate, Austin, TX
- 2003 – 2010 Educational Resource Agent, Chandra X-Ray Observatory