

Dustin M. Schroeder

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
- 2016 – present 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
- 2006 – 2007 Undergraduate Researcher, Bucknell University Department of Electrical Engineering
- 2005 Undergraduate Researcher, Lerner Research Institute, Cleveland Clinic Foundation
- 2004 Undergraduate Researcher, Harvard-Smithsonian Center for Astrophysics

AWARDS

- 2016 Frederick E. Terman Fellowship, 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
- 2005 COMAP Mathematical Contest in Modeling, Meritorious Winner

PUBLICATIONS

Journal Articles (* indicates student or postdoctoral advisee)

- 2018 L. Carrer^{*}, D.M. Schroeder, A. Romero-Wolf, L. Bruzzone, The Effects and Implications of Jovian Noise Temporal and Structural Characteristics on Radar Passive Sounding of Jupiter's Icy Moons (in prep)
- 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 Discussions (in review)
- 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 (in review)
- 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, Seasonal Surface Meltwater Impounded by Persistent Englacial Storage in West Greenland (in review)
- 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 (in press)
- 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 (in press)
- 2018 M.S. Haynes, E. Chapin, D.M. Schroeder, Geometric Power Fall-off in Radar Sounding, IEEE Transactions in Geoscience and Remote Sensing (in press)
- 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
- 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
- 2018 B.A. Campbell, D.M. Schroeder, J.L. Whitten, Mars Radar Clutter and Surface Roughness Characteristics from MARSIS Data, Icarus
- 2017 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
- 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
- 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
- 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
- 2017 Y. Aglyamov^{*}, D.M. Schroeder, S.D. Vance, Bright prospects for radar detection of Europa's ocean, Icarus
- 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
- 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

Schroeder C.V. April 2018

- 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*
- 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*
- 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*
- 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*
- 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*
- 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*
- 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*
- 2015 C. Grima, D.D. Blankenship, D.M. Schroeder. Radar Signal Propagation through Europa Ionosphere, *Planetary and Space Science*
- 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 Totten Glacier, East Antarctica, *Nature Geoscience*
- 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*
- 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*
- 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*
- 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*
- 2014 C. Grima, D.M. Schroeder, D.D. Blankenship, D.A. Young. Planetary Landing Zone Assessment by Radar Sounder: Demonstration in Antarctica, *Planetary and Space Science*
- 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*
- 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*
- 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 of Glaciology*

Schroeder C.V. April 2018

- 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*
- 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*

INVITED TALKS

- 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
- 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, Tromso
- 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)

- 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 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 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 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. April 2018

- 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

Schroeder C.V. April 2018

- 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)
- 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

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- 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
- 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

Schroeder C.V. April 2018

- 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
- 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

Schroeder C.V. April 2018

- 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
- 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 Antarctic 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

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- 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

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SPACECRAFT MISSION PARTICIPATION

2016 – present Science Team Member, Mini-RF Radar, Lunar Reconnaissance Orbiter, NASA
2015 - present Science Team Member, REASON Radar Sounder, Europa Mission, NASA
2015 – present Member, Interiors Working Group, Europa Project Science Group, NASA
2015 - present 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

2010 – 2011 RF Engineer and Radar Operator, ICECAP and Operation Ice Bridge, East Antarctica (2 Months)
2009 – 2010 RF Engineer and Radar Operator, The ICECAP Project, East Antarctica (3 Months)
2008 – 2009 RF Engineer and Radar Operator, The ICECAP Project, East Antarctica (3 Months)

INSTRUMENT DEVELOPMENT

2016 – present Stanford Low-resource Ice Penetrating Radar (SLIPR)
2014 – present REASON Radar Sounder, NASA Europa Clipper Mission
2013 – 2017 RIME Radar Sounder, ESA JUICE Mission
2010 – 2014 University of Texas MARFA Ice Penetrating Radar
2008 – 2011 University of Texas HiCARS II Ice Penetrating Radar

GRANTS

2015 – 2033 Co-I, Science Team Member, Radar for Europa Assessment and Sounding: Ocean to Near Surface (REASON), Europa Clipper Mission, NASA
2017 – 2022 Collaborator, REsolving Subglacial Properties, hydrOlogical Networks and Dynamic Evolution of ice flow on the gReenland ice sheet (RESPONDER), European Commission
2018 – 2021 Co-I, TIME (Thwaites Interdisciplinary Margin Evolution) - The Role of Shear Margin Dynamics in the Future Evolution of Thwaites Drainage Basin, NSF-NERC
2016 – 2019 PI, Joint Radar and Model Investigations of Greenland Basal Water Conditions, NASA
2016 – 2019 Co-I, Mini-RF Radar, Lunar Reconnaissance Orbiter, NASA
2017 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

PROFESSIONAL SERVICE

Leadership

2019 Chair, IGS Symposium Scientific, Editorial, and Organizing Committee
2018 Convener, Invited Session, IEEE Geoscience and Remote Sensing Symposium
2016 – present Steering Committee, Solid Earth Response and Influence on Cryosphere Evolution, SCAR

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2015 - present AGU Outstanding Student Paper Judge
2017 AGU Planetary Session Convener
2017 EGU Outstanding Student Paper Judge
2016 AGU Planetary Session Convener
2016 AGU Fall Meeting Mentor
2015 AGU Planetary Session Convener

Panel Participation

Australian Antarctic Science Program (external), German Research Foundation (external), NASA Cassini Data Analysis and Participating Scientist (external), NASA Earth Science Fellowship Program, NASA Maturation of Instruments for Solar System Exploration(external), NASA Operation Ice Bridge, NASA Planetary Fellowship Program (external), NASA Planetary Instrument Concepts for Advancement of Solar System Observations (external), NASA Solar System Workings (external), NSF Science and Technology Center (external), University of Missouri Research Board (external),

Reviewer

Annals of Glaciology, 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 Transactions on Aerospace and Electronic Systems, , IEEE Transactions on Geoscience and Remote Sensing, Journal of Geophysical Research, Journal of Glaciology, Nature, 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
Member, IEEE Geoscience and Remote Sensing Society
Member, IEEE Antennas and Propagation Society
Member, International Association of Cryospheric Scientists
Member, International Glaciological Society
Member, Society of Exploration Geophysicists

INSTITUTIONAL SERVICE

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 Graduate Admissions Committee, Department of Geophysics, Stanford University
2016 – present Pre-Major Advisor, Stanford University
2016 – present Long Term Planning 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

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- 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

- 2018 Ice Penetrating Radar, Stanford University
- 2018 Know Your Planet: Big Earth, Stanford University (Guest Lecturer)
- 2017 Mission to Europa, Stanford University
- 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
- 2010 Radar Principles Short Course, University of Texas Institute for Geophysics

Postdoctoral Scholar Advising

- 2017 – present Davide Castelletti, Stanford University, Geophysics
- 2017 – present Winnie Chu, Stanford University, Geophysics
- 2017 – present Tom Jordan, Stanford University, Geophysics
- 2017 – present Matthew Siegfried, Stanford University, Geophysics
- 2017 – present Elisa Mantelli, Stanford University, Geophysics
- 2015 – 2016 Klara Kalousova, Jet Propulsion Laboratory, Planetary Science

Graduate Student Advising

- 2016 – present Andrew Hilger, Stanford University, Electrical Engineering
- 2017 – present Emma (Mickey) MacKie, Stanford University, Geophysics
- 2016 – present Sean Peters, Stanford University, Electrical Engineering

Graduate Student “Second-Project” and Rotation Advising

- 2016 – present Cansu Culha, Stanford University, Geophysics
- 2017 – present Noah Dewar, Stanford University, Geophysics
- 2016 – present Cooper Elsworth, Stanford University, Geophysics
- 2016 – present Alexander Kendrick, Stanford University, Geophysics
- 2016 – present Roger Michaelides, Stanford University, Geophysics

Visiting Graduate Student Mentorship

- 2017 – present Michael Cooper, University of Bristol, Geography
- 2017 – present Leonardo Carrer, University of Trento, Electrical Engineering
- 2017 Corinne Benedek, University of Cambridge, Geography
- 2016 – 2017 T.J. Young, University of Cambridge, Geography

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- 2015 – 2017 Gregor Steinbruegge, Technical University of Berlin, Planetary Science
- 2015 – 2017 Winnie Chu, Columbia University, Geophysics
- 2014 – 2017 Davide Castelletti, University of Trento, Electrical Engineering

Undergraduate and Co-Term Student Mentorship

- 2016 – present Theo Diamandis, Stanford University, Electrical Engineering
- 2016 – present Logan Herrera, Stanford University, Electrical Engineering
- 2017 – present Kai Marshland, Stanford University, Electrical Engineering
- 2016 – present Thomas Teisberg, Stanford University, Electrical Engineering
- 2017 – present Meera Radhakrishnan, Stanford University, Electrical Engineering
- 2017 – present Kathy Vega, Fullerton Community College, Engineering Physics
- 2016 – 2018 Nikita Darbar, Stanford University, Chemical Engineering
- 2016 – 2018 Aria Tedjarati, Stanford University, Electrical Engineering
- 2017 – 2018 Stephen Spears, Stanford University, Electrical Engineering
- 2016 – 2017 Paige Brown, Stanford University, Undeclared
- 2016 - 2017 Joan Creus-Costa, Stanford University, Electrical Engineering
- 2016 – 2017 Jake Hillard, Stanford University, Electrical Engineering
- 2016 – 2017 Iskender Kushan, Stanford University, Electrical Engineering, Now: Microsoft
- 2016 – 2017 Sasha Maldonado, Stanford University, Electrical Engineering
- 2017 Allen Holster, Stanford University, Electrical Engineering
- 2017 Ryan Kirk, Stanford University, Mechanical Engineering
- 2017 Kat McNeill, Stanford University, Undeclared
- 2017 Kirill Safin, Stanford University, Electrical Engineering
- 2017 Adam Stanford-Moore, Stanford University, Physics
- 2016 Valarie Sarge, Massachusetts Institute of Technology, Electrical Engineering
- 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
- 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, Now: Ph.D. Student in Geophysics at UCSD

Dissertation Committee Membership

- 2017 – present Priyanka Dutta, Stanford University, Geophysics
- 2017 – present Nattavadee Srisutthiyakorn, Stanford University, Geophysics
- 2017 – present Noah Dewar, Stanford University, Geophysics
- 2016 – present Cansu Culha, Stanford University, Geophysics
- 2016 – present Cooper Elsworth, Stanford University, Geophysics
- 2016 – present Alex Kendrick, Stanford University, Geophysics
- 2016 – present Roger Michaelides, Stanford University, Geophysics
- 2016 – present Yujie Zheng, Stanford University, Geophysics
- 2016 Emily Fay, Stanford University, Geophysics
- 2016 Sam Johnstone, Stanford University, Geology

Schroeder C.V. April 2018

2016 Michael Tsiang, Stanford University, Earth System Science

High School Student Mentorship

2007 – 2018 Coached and mentored over 40 high school students in science competitions and/or research

OUTREACH

2016 – present Faculty Advisor, Stanford-Berkeley Science Olympiad Invitational
2014 – present Chair, Earth and Space Science Committee, National Science Olympiad
2003 – present 6th-12th Grade Astronomy and Planetary Science National Event Supervisor, Science Olympiad
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
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
2003 – 2014 Member, Earth and Space Science Committee, National 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