
ANNA ELIZABETH ENGLE

Physical Sciences, Room 209, 527 S. Beaver St., Flagstaff, AZ 86011

ace98@nau.edu

Education

Ph.D. Student, Astronomy & Planetary Sciences, Northern Arizona University, 2019-Present

B.S., Astronomy, University of Maryland, 2018

Minor in Planetary Sciences

B.A., Studio Art, University of Maryland, 2011

Honors & Awards

NASA FINESST Fellowship, 2020

Outstanding Undergraduate Teaching Assistant Award, University of Maryland, 2018

Department of Astronomy Senior Honors Program, University of Maryland, 2017-2018

NSF REU Summer Program, Northern Arizona University, 2017

Maryland Space Grant Consortium Scholarship Award, 2017

Publications

A.E. Engle, J. Hanley, S. Dustrud, G.E. Lindberg, W.M. Grundy, G. Thompson, S.C. Tegler (2021). Phase Diagram for Methane-Ethane System and its Implications for Titan. *The Planetary Science Journal*. Accepted.

J.K. Steckloff, J.M. Soderblom, K.K. Farnsworth, V.F. Chevri er, J. Hanley, A. Soto, J.J. Groven, W.M. Grundy, L.A. Pearce, S.C. Tegler, **A.E. Engle** (2020). Stratification Dynamics of Titan’s Lakes via Methane Evaporation. *The Planetary Science Journal*, **1**, id. 26.

S.C. Tegler, T. Stufflebeam, W. Grundy, J. Hanley, G.E. Lindberg, S. Dustrud, **A. Engle**, T. Dillingham, D. Matthew, D. Trilling, H. Roe, J. Llama, G. Mace, E. Quirico (2019). A New Two-Molecule Combination Band as a Diagnostic of Carbon Monoxide Diluted in Nitrogen Ice on Triton. *Astronomical Journal*, **158**, id. 17.

Conference Proceedings

A.E. Engle, J. Hanley, S.P. Tan, S.C. Tegler, W.M. Grundy, G.E. Lindberg, J.K. Steckloff (2021), Mapping Changes in the Methane-Ethane System when adding Nitrogen at Titan Surface Conditions. *LPSC LII*, Abstract #1722.

A.E. Engle, J. Hanley, S. Dustrud, G. Thompson, G.E. Lindberg, W.M. Grundy, S.C. Tegler (2020), Phase Diagram for the Methane-Ethane System at Conditions Relevant to Titan. *52nd DPS Meeting*.

A.E. Engle, J. Hanley, W.M. Grundy, G.E. Lindberg, S. Dustrud, S.C. Tegler, G. Thompson (2020). Phase Diagram for Methane-Ethane System and its Implications for Titan. *Titan Through Time V*.

A. Engle, J. Hanley, W.M. Grundy, S. Dustrud, G.E. Lindberg, S.C. Tegler (2019). Identifying the Solid Phase Transitions of Ethane Using Raman Spectroscopy at Conditions Relevant to Titan’s Surface. *Northern Arizona Planetary Science Alliance (NAPSA) Poster Session*.

A. Engle, J. Hanley, W.M. Grundy, S. Dustrud, G.E. Lindberg, S.C. Tegler (2019). Ethane Studies at Conditions Relevant to Titan. *Flagstaff Astronomy Symposium*.

A. Engle, J. Hanley, W.M. Grundy, S. Dustrud, G.E. Lindberg, S.C. Tegler (2019). Identifying the Solid Phase Transitions of Ethane Using Raman Spectroscopy at Conditions Relevant to Titan’s Surface. *LPSC L*, Abstract #2509.

J. Hanley, J.J. Groven, W.M. Grundy, S. Dustrud, **A. Engle**, G.E. Lindberg, S.C. Tegler (2019). Characterization of Possible Two Liquid System in Titan’s Seas. *LPSC L*, Abstract #1712.

S.C. Tegler, T. Stufflebeam, W. Grundy, J. Hanley, G.E. Lindberg, S. Dustrud, **A. Engle**, T. Dillingham, E. Quirico (2018). A New, Unusual, and Diagnostic Band in Near-Infrared Spectra of Laboratory Ice Samples on Triton. *50th DPS Meeting*.

A. Engle, J. Hanley, W.M. Grundy, G.E. Lindberg, S. Dustrud, S.C. Tegler (2018). Laboratory Experiments of Ices Relevant to Outer Solar System Bodies. *Flagstaff Astronomy Symposium*.

- A. Engle**, W. Grundy, S. Dustrud (2018). Raman Shop: Exploring the Carbon Monoxide-Nitrogen-Methane Ternary System of Sputnik Planitia via Raman Spectroscopy. *LPSC XLIX*, Abstract #2763.
- A. Engle**, W. Grundy, S. Dustrud (2017). Raman Shop: Using Raman Spectroscopy to Probe the Carbon Monoxide-Nitrogen-Methane Ternary System. *Planetary Astronomy Late-Morning Seminar (PALS)*.
- A. Engle**, W. Grundy, S. Dustrud (2017). Raman Shop: Using Raman Spectroscopy to Probe the Carbon Monoxide-Nitrogen-Methane Ternary System. *REU End of Program Presentation*.
- J.M. Sunshine, L.M Feaga, T. Farnham, S. Protopapa, M.S. Kelley, **A. Engle** (2016). Characterizing the Large (cm-size) Grains Around Comet 103P/Hartley 2". *48th DPS Meeting*.

Research

Graduate Research Assistant, Northern Arizona University, 2019 – Present

Advisor: Jennifer Hanley

Research Specialist, Northern Arizona University, 2018 – 2019

Advisor: Jennifer Hanley & Will Grundy

Honors Thesis Student, University of Maryland, 2017 – 2018

Advisor: Jessica Sunshine

REU Summer Student, Northern Arizona University, 2017

Advisor: Will Grundy

Undergraduate Research Assistant, University of Maryland, Small Bodies Group, 2016 – 2017

Advisor: Jessica Sunshine

Undergraduate Summer Research Assistant, University of Maryland, Small Bodies Group, 2015

Advisor: Lori Feaga

Teaching Experience

Graduate Teaching Assistant, Northern Arizona University, Dept. of Astronomy & Planetary Science, 2020

Undergraduate Teaching Assistant, University of Maryland, Dept. of Astronomy, 2017 – 2018

Programming Languages

Python

MATLAB

IDL

IDL/ENVI

GMT

Extracurriculars

Northern Arizona University Quantum Club

Treasurer, 2020 – Present

University of Maryland Radio Station (WMUC)

Radio DJ, 2017 – 2018

Astronomy Gentleladies' Network (AGN)

Undergraduate Representative and Events Coordinator, 2017 – 2018

Member, 2015 – 2018

University of Maryland Astronomy Club (AstroTerps)

Member, 2015 – 2018

University of Maryland Observatory

Volunteer, 2015 – 2017

Anne Arundel Community College Astronomy Club

Vice President, 2014