Daniel E. Lalich

University of Texas Institute for Geophysics, Jackson School of Geosciences, University of Texas at Austin
440-666-2175; dlalich90@gmail.com

Education:

2017	University of Texas at Austin, Austin, TX	Ph.D., Geoscience
2012	Case Western Reserve University, Cleveland, OH	B.S., Astronomy Physics Minor

Experience:

2018 **Postdoctoral Researcher**, University of Texas at Austin
Mapped and analyzed radar reflectors in the Greenland ice sheet in order to determine past accumulation and flow rates

2017 **Adjunct Instructor of Astronomy,** Austin Community College

2012-2017 **Graduate Research Assistant**, University of Texas at Austin
Mapped and analyzed subsurface ice deposits on Mars using the Shallow Radar instrument on the Mars Reconnaissance Orbiter

2009-2012 **Undergraduate Research Assistant,** Case Western Reserve University
Collected and organized astronomical observations of nearby Cepheid variable stars. Helped develop software tools for analyzing stellar spectra.

Publications and Presentations:

Lalich, D. & Holt, J.W., New Martian Climate Constraints From Radar Reflectivity Within The North Polar Layered Deposits, *Geophysical Research Letters.* (2016).

Lalich, D., Holt, J.W., & Smith, I.B., Radar Reflectivity as a Proxy for the Dust Content of Individual Layers in the Martian North Polar Layered Deposits. *In prep.*

Lalich, D. & Holt, J.W., New Constraints on Dust Content in the North Polar Layered Deposits, Mars from SHARAD Reflectivity. *48th Lunar and Planetary Science Conference* (2017)

Lalich, D. & Holt, J.W., Modeling SHARAD Reflectors As Marker Beds: A Possible Record Of Regional Accumulation Rates In The North Polar Layered Deposits, *6th International Conference on Mars Polar Science and Exploration*. (2016).

Lalich, D. & Holt, J. W., SHARAD Reflectors and Marker Beds: Unlocking the Climate Record of the North Polar Layered Deposits, Mars. *47th Lunar and Planetary Science Conference.* (2016).

Lalich, D. & Holt, J. W., Constraining Dust Content in Individual Martian NPLD Layers Using SHARAD Data. *AGU Fall Meeting.* (2015).

Lalich, D., Holt, J. W. & Grima, C., Heterogeneity of SHARAD Reflectivity in the NPLD: Implications for the Climate Record. *46th Lunar and Planetary Science Conference*. (2015).

Lalich, D., Holt, J. W., & Campbell, B. A., Determining the Composition of the North Polar Layered Deposits Using SHARAD Observations and Modeling: Climate Implications, *8th International Conference on Mars*. (2014).

Awards:

NASA Earth and Space Science Fellowship 2014-2017.