Timothy Larson, PhD
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Work Experience

- January 2020 - present NASA subcontract for global helioseismic analysis
- Fall 2019 & Fall 2020 Adjunct Instructor, Moberly Area Community College
- January 2019 – May 2021 Tutor, Moberly Area Community College
- Sept 2016 – Aug 2017 Postdoctoral Scholar, Stanford University
- Sept 2003 – Aug 2016 Research Assistant, Stanford University
- Fall 2007 – Fall 2009 Resident Observer, Wilcox Solar Observatory, Stanford

Education

- 2016 PhD Physics, Stanford University
- 2014 MS Physics, Stanford University
- 2002 BA Physics, Mathematics & Islamic Studies, Washington University in St. Louis

Research Highlights

- Global Helioseismology - lead developer for globalhs data analysis pipeline for the Helioseismic and Magnetic Imager aboard the Solar Dynamics Observatory
- Sonification of Solar Harmonics (SoSH) Project, 2018 – Present
  - http://solar-center.stanford.edu/SoSH/

Publications

- "Global-Mode Analysis of Full-Disk Data from the Michelson Doppler Imager and the Helioseismic and Magnetic Imager", Larson, T.P. & Schou, J. Sol Phys (2018) 293: 29. https://doi.org/10.1007/s11207-017-1201-5
- "Improved Helioseismic Analysis of Medium-*l* Data from the Michelson Doppler Imager", Larson, T.P. & Schou, J. Sol Phys (2015) 290: 3221. https://doi.org/10.1007/s11207-015-0792-y
- "Global Effects of Local Sound-Speed Perturbations in the Sun: A Theoretical Study", Hanasoge, S.M. & Larson, T.P. Sol Phys (2008) 251: 91. https://doi.org/10.1007/s11207-008-9208-6
- 4th+ author on many more, in role of data analyst.
- The SoSH project was presented at both the 25th International Conference for Auditory Display and the 234th meeting of the American Astronomical Society, both 2019

Skills

- Proficiency in C, Python, IDL and Pure Data
- Familiarity with Matlab and SQL
- Extensive experience communicating physics concepts