

Somayeh Khakpash

CURRICULUM VITAE

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Research interests

Microlensing, Astronomical Data Science and Machine Learning, Stellar Astrophysics

Education

Lehigh University		Sharif University of Technology	
Ph.D. Physics	2017- present	B.A. Physics	2010-2015
M.S. Physics	2015- 2016		

Skills

Programming Software: Python, C++, MATLAB, LaTeX

Professional Packages: Astropy, Scipy, George, AstroML, scikit-learn, Glue, Bokeh, ParaView

Refereed Publications

1. Khakpash, S., Penny, M. and Pepper, J., 2019. “*A Fast Approximate Approach to Microlensing Survey Analysis*”. *The Astronomical Journal*, 158(1), p.9.
2. Johns, D., Reed, P., Rodriguez, J., Pepper, J., 2019. “*KELT-23b: A Hot Jupiter Transiting a Near-Solar Twin Close to the TESS and JWST Continuous Viewing Zones*”. *The Astronomical Journal*, 158(2), p.14.
3. Rodriguez, J.E., Eastman, J.D., Zhou, G., Quinn, 2019. “*KELT-24b: A 5M_J Planet on a 5.6 day Well-Aligned Orbit around the Young V= 8.3 F-star HD 93148*”. *arXiv preprint arXiv:1906.03276*.

White Papers

1. Street, R.A., Lund, M.B., Donachie, M., Khakpash, 2018. “*Unique Science from a Coordinated LSST-WFIRST Survey of the Galactic Bulge*”. *arXiv preprint arXiv:1812.04445*
2. Street, R.A., Lund, M.B., Khakpash, S., Donachie, 2018. “*The Diverse Science Return from a Wide-Area Survey of the Galactic Plane*”. *arXiv preprint arXiv:1812.03137*.

Attended Conferences and Workshops

- Central Pennsylvania Consortium Conference, Apr 2019, Gettysburg, PA
- International Microlensing Conference, Jan 2019, Nashville, TN
- American Astronomical Society Meeting, Jan 2019, Seattle, WA
- American Astronomical Society Meeting, Jan 2018, Washington DC
- LSST Transients and Variable Stars Science Collaboration Workshop, Jun 2018, Bethlehem, PA
- Sagan Exoplanet Workshop: Microlensing in the Era of WFIRST, Aug 2017, Pasadena, CA
- KELT Workshop, Jun 2017, Bethlehem, PA
- KELT Workshop, Aug 2016, Nashville, TN
- Astrophily Conference, Aug 2016, Philadelphia, PA
- Astronomy Summer School, Aug 2013, Karaj, Iran

Contributed Talks and Posters

- **Talk** at Central Pennsylvania Consortium Conference, Apr 2019, Gettysburg, PA
- **Talk** at International Microlensing Conference, Jan 2019, Nashville, TN
- **Talk** at American Astronomical Society Conference, Jan 2019, Seattle, WA
- **Poster** at American Astronomical Society Conference, Jan 2018, Washington DC
- **Talk** at KELT Workshop, Aug 2016, Nashville, TN

Awards and Honors

- AAS FAMOUS Travel Grant, Jan 2019
- LSSTC Data Science Fellowship Program 2017-2019
- Lehigh University, College of Arts and Sciences Dean’s Summer Fellowship 2017
- Ranked among the top three students in the first Astronomy summer school held by the International Occultation Timing Association in Middle East (IOTA/ME), Aug 2013, Karaj, Iran