

# Megan BEDELL, Ph.D.

## ABOUT

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POSITION: Flatiron Research Fellow  
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## EDUCATION

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UNIVERSITY OF CHICAGO	2012 - 2017
PhD in Astronomy & Astrophysics	
Dissertation Title: Illuminating the Origins of Planets with Solar Twins	
Advisor: Jacob Bean	
HAVERFORD COLLEGE	2008 - 2012
Graduated Magna Cum Laude	
B.S. in Physics and Astronomy	
UNIVERSITY OF OXFORD	2010 - 2011
Exchange year	

## GRANTS, HONORS & AWARDS

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Josephine DeKarman Fellow	2016 - 2017
Lewis & Clark Field Scholar in Astrobiology	2016 - 2017
Illinois Space Grant Fellow	2016 - 2017
University of Chicago Harper Dissertation Fellow	2016 - 2017
NSF Graduate Research Fellow	2013 - 2016
University of Chicago McCormick Fellow	2012 - 2014
Phi Beta Kappa	2012
Robert C. Byrd Honors Scholar	2008 - 2012

## OBSERVING EXPERIENCE

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NASA Spitzer (as program PI)	15.4 hours, Cycle-12 (2016)
ESO La Silla/HARPS	47 nights, 2013 - 2017
Keck/HIRES	6 half-nights, 2015 - 2017
KPNO/WIYN 0.9m	3 nights, November 2011
Maria Mitchell Observatory/Loines 24-inch	approx. 40 nights, July - Sept. 2010

## CONFERENCE PRESENTATIONS

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Know Thy Star, Know Thy Planet (contributed talk)	October 2017
AAS 229th Meeting (dissertation talk)	January 2017
Linking Exoplanet & Disk Compositions (contributed talk)	September 2016
Exoplanets I (poster)	July 2016
Extreme Solar Systems III (contributed talk)	November 2015
Planet Signatures from Precision Spectroscopy (invited talk)	August 2015
Extreme Precision Radial Velocities (poster)	July 2015
Towards Other Earths II (poster)	September 2014

Sagan Workshop (poster)	July 2014
AAS 223rd Meeting (contributed talk)	January 2014

## INVITED SEMINARS

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Harvard CfA, Stars & Planets Seminar	November 2016
MIT, Exoplanet Tea	November 2016

## PRESS

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["Astronomers discover dark past of planet-eating 'Death Star,'" UChicago press release.](#)

["Jupiter Twin Discovered Around Solar Twin,"](#) ESO press release, covered by Associated Press, Discovery News, Space.com, and others.

["Oldest Solar Twin Identified,"](#) ESO press release, covered by Science News, Space.com, and others.

## TEACHING AND MENTORSHIP

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Mentor, UChicago Women in Physics and Astronomy	2014 - 2016
Invited Speaker, UChicago GeoUnion (undergrad student club)	2015
Guest Lecturer, Universidade de São Paulo	2015
TA, Physical Sciences 120: The Origin of the Universe	2013
TA, Physical Sciences 119: Stellar Astronomy & Astrophysics	2012
Peer Tutor in Physics and Astronomy at Haverford College	2011 - 2012

## OUTREACH

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Co-founder, Chicago Astronomy on Tap <i>quarterly outreach events at a local bar</i>	2016 - 2017
Life Long Learning Presenter <i>60-minute public lectures given at Chicago libraries &amp; senior centers</i>	2015 - 2017
Astronomy Conversations Presenter <i>volunteer role at Adler Planetarium (~1 hr/month ongoing)</i>	2014 - 2017
Volunteer Dudley Observatory	Summer 2012
Public Observing Coordinator Haverford College	2009 - 2010; 2011 - 2012
Public Observing Host & Observatory Tour Guide Maria Mitchell Observatory	Summer 2010

## SERVICE

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Referee for ApJ	2015 - present
Student Rep, Brinson Lectureship Committee, UChicago Astro Department	2015 - 2017
Leader, UChicago Exoplanet Journal Club	2014 - 2015
Student-Faculty Liaison, UChicago Astro Department	2014 - 2015
Co-organizer, Broader Horizons Speaker Series	2013 - 2014

## PUBLICATION LIST

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### REFEREED PAPERS

1. dos Santos, L., Meléndez, J., **Bedell, M.**, et al., *Spectroscopic binaries in the Solar Twin Planet Search program: from substellar-mass to M dwarf companions*, MNRAS in press
2. Freitas, F., Meléndez, J., **Bedell, M.**, et al., *The Solar Twin Planet Search VI. The age - chromospheric activity relation*, A&A submitted
3. Gandolfi, D., Barragán, O., Hatzes, A. P., et al. [including **Bedell, M.**], *The Transiting Multi-planet System HD 3167: A 5.7  $M_E$  Super-Earth and an 8.3  $M_E$  Mini-Neptune*, 2017, AJ, 154, 123
4. **Bedell, M.**, Bean, J.L., Meléndez, J., et al., *Kepler-11 is a Solar Twin: Revising the Masses and Radii of Benchmark Planets via Precise Stellar Characterization*, 2017, ApJ 839, 94
5. Malik, M., Grosheintz, L., Mendonça, J. M., et al. [including **Bedell, M.**], *HELIOS: An Open-Source, GPU-Accelerated Radiative Transfer Code For Self-Consistent Exoplanetary Atmospheres*, 2017, AJ 153, 56
6. Meléndez, J., **Bedell, M.**, Bean, J.L., et al., *The Solar Twin Planet Search V. Close-in, low-mass planet candidates and evidence of planet accretion in the solar twin HIP 68468*, 2017, A&A 597, A34
7. Barragán, O., Grziwa, S., Gandolfi, D., et al. [including **Bedell, M.**], *EPIC 211391664b: A 32- $M_{\oplus}$  Neptune-sized planet in a 10-day orbit transiting an F8 star*, 2016, AJ 152, 193
8. dos Santos, L.A., Meléndez, J., do Nascimento, J.-D., Jr., **Bedell, M.**, et al., *The Solar Twin Planet Search IV. The Sun as a typical rotator and evidence for a new rotational braking law for Sun-like stars*, 2016, A&A 592, A156
9. Tucci Maia, M., Ramírez, I., Meléndez, J., **Bedell, M.**, et al., *The Solar Twin Planet Search III. The [Y/Mg] clock: estimating stellar ages of solar type stars*, 2016, A&A 590, A32
10. **Bedell, M.**, Meléndez, J., Bean, J.L., Ramírez, I., Asplund, M., et al., *The Solar Twin Planet Search II. A Jupiter twin around a solar twin*, 2015, A&A 581, A34
11. **Bedell, M.**, Meléndez, J., Bean, J.L., Ramírez, I., Leite, P., Asplund, M., *Stellar Chemical Abundances: In Pursuit of the Highest Achievable Precision*, 2014, ApJ 795, 23
12. Ramírez, I., Meléndez, J., Bean, J.L., Asplund, M., **Bedell, M.**, et al., *The Solar Twin Planet Search I. Fundamental parameters of the stellar sample*, 2014, A&A 572, A48
13. Meléndez, J., Ramírez, I., Karakas, A., et al. [including **Bedell, M.**], *18 Sco: a solar twin rich in refractory and neutron-capture elements. Implications for chemical tagging*, 2014, ApJ 791, 14
14. Monroe, T., Meléndez, J., Ramírez, I., et al. [including **Bedell, M.**], *High Precision Abundances of the Old Solar Twin HIP 102152: Insights on Li Depletion from the Oldest Sun*, 2013, ApJ 773, L32
15. **Bedell, M.**, Villaume, A, et al., *Monitoring  $H\alpha$  Emission and Continuum of UXORs: RR Tauri*, 2011, AJ 142, 164

### INVITED REVIEWS

1. Meléndez, J., Bean, J. L., **Bedell, M.**, et al., 2015, The Messenger, 161, 28