

Peter Plavchan

Assistant Professor of Astronomy

Department of Physics, Astronomy and
Materials Science
Missouri State University
Kemper Hall 103N
901 South National Ave
Springfield, MO 65897

Office: (417) 836-5609
Cell: (626) 234-1628
Fax: (417) 836-6226
peterplavchan@missouristate.edu
<http://exo.missouristate.edu>
twitter:@PlavchanPeter

Education

University of California, Los Angeles , Los Angeles, CA MS, PhD in Physics	2001-2006
California Institute of Technology , Pasadena, CA BS in Physics, with honor	1996-2001

Press, Awards, and Honors

KOLR 10 News Lead Story on “Snow Moon” https://twitter.com/PlavchanPeter/status/830268723130990593	2017
KSMU NPR Radio, STEM Spots “How A Microwave Helped Find New Galaxies” http://ksmu.org/post/how-microvae-helped-find-new-galaxies	2017
Debunking claims of alien civilization detections, various http://fivethirtyeight.com/features/is-that-an-alien-signal-please-answer-on-a-scale-of-1-to-10/	2017
JPL NASA Press Release, “Light echoes give clues to young star’s protoplanetary disc”	2016
“Surely You’re Joking” science comedy podcast “Prof. Peter Plavchan, Richard Chassler and the ensemble of alien mega-structures,” https://soundcloud.com/surely-youre-joking/peter-plavchan	2016
KSMU NPR Radio, STEM Spots “Planets: Formed From Dust, Gas, and Some Luck,” http://ksmu.org/post/planets-formed-dust-gas-and-some-luck	2016
Carnegie Science Press Release “New Tool Refines Exoplanet Search”	2016
Caltech, Keck Observatory Press Release “Novel Calibration Tool Will Help Astronomers Look for Habitable Exoplanets”	2016
Springfield News Leader Newspaper article “MSU student working to solve costly problem in astronomy”	2015
KSMU NPR Radio, STEM Spots “MSU Professor Explores The Heavens to Find the Next Earth,” http://ksmu.org/post/msu-professor-explores-heavens-find-next-earth	2015
Missouri State Press Release, “Astronomy professor studies Earth-like planets,” Featured in Science Magazine news as “Closest Exoplanet is Remarkably Earth-Sized”	2015

NASA Honor Achievement Award, NASA Exoplanet Archive Team	2014
Citation: <i>For outstanding achievement in the rapid and on-budget launch of the NASA Exoplanet Archive</i>	
JPL NASA Press Release, “Spitzer Discovers Young Stars with a Hula-Hoop”	2013
JPL NASA Press Release, “Stars Don’t Obliterate Their Planets (Very Often)”	2013
NASA Honor Achievement Award, Spitzer Science In-Reach Team	2010
Citation: <i>For outstanding support of Spitzer IRAC Warm Instrument Characterization and significant contributions to NASA and JPL commitments to education of the global community.</i>	
UCLA Physics Division Fellowship	2001-2006
AAS, UCLA Press Release, “The Case of the Missing Disks”	2005
Kobe International School of Planetary Sciences Fellowship	2005
Astronomy Department Outstanding Teaching Award	2002-2003
IBM Watson Fellowship	1996-2000

Research Experience

Visiting Professor University of Pennsylvania, Philadelphia, PA	2014-current
Assistant Research Scientist NASA Exoplanet Science Institute, Caltech	2014
Assistant Staff Scientist NASA Exoplanet Science Institute, Caltech, Pasadena	2008-2014
Post-Doctoral Scholar Caltech, Pasadena, CA	2006-2008
Doctoral Research University of California, Los Angeles	2004-2006
Thesis Title: “M Dwarf Planetary Systems”	
Thesis Advisor: Professor Michael Jura	
Graduate Research University of California, Los Angeles	2001-2004
Academic Part-Time Employee Jet Propulsion Laboratory, Pasadena, CA	1999-2001
Summer Undergraduate Research Fellow Caltech, Pasadena, CA	1997,1999

Professional Membership

American Astronomical Society	2003-current
American Association for the Advancement of Science	2011-current
International Astronomical Union	2003-present
American Chemical Society	2011-2016

Grantsmanship

Principal Investigator or Science Lead:		
NASA Research Contract	2017	\$107k
NASA EPSCoR Research Infrastructure Development	2015	\$38k
JPL Research Contract	2015	\$5k
JPL Research and Technology Development	2013	\$200k
NASA Origins of Solar Systems	2012	\$460k*
JPL Research and Technology Development	2012	\$190k
JPL Center for Exoplanet Science	2011	\$15k
JPL Center for Exoplanet Science	2010	\$6k
JPL Center for Exoplanet Science	2009	\$14k
Spitzer Space Telescope, GO-6	2009	\$35k
Spitzer Space Telescope, GO-5	2008	\$46k

Co-Investigator: (significant funded role):

Spitzer Space Telescope, GO-8	2011	\$15k
Spitzer Space Telescope GO-6 Exploration Science	2009	\$600k
SIM Science Study	2009	\$75k
Spitzer Space Telescope, GO-4	2007	\$5k

* Proposal rated “selectable” for funding, but not funded due to sequestration.

Teaching Experience

Assistant Professor , Missouri State University, Springfield, MO	2014-current
Adjunct Professor , Cerritos College, Los Angeles, CA	2014
Visiting Professor , University of California, Los Angeles, CA	2010
Adjunct Professor , University of Judaism, Bel-Air, CA	2004-2006
Volunteer Teacher Team Leader , Crossing the Digital Divide, Los Angeles, CA	2003-2004
Teaching Associate , University of California, Los Angeles	2002-2003
Teaching Assistant , University of California, Los Angeles	2001-2002
Undergraduate Teaching Assistant , Caltech, Pasadena, CA	2001

Accepted Observing Proposals

Principal Investigator/Technical Contact:

7 nights, IRTF iSHELL near-infrared absorption gas cell instrument	2016-2017
76 nights, IRTF CSHELL near-infrared absorption gas cell instrument	2014-2016
2 nights, Palomar AO imaging	2012-2013
23 nights, IRTF CSHELL near-infrared absorption gas cell instrument	2010-2012
10 nights, SMARTS Andicam	2009-2011
51 hours, Spitzer Space Telescope, IRAC, MIPS & IRS	GTO-4,5,GO-5,6
2.5 nights, Keck Observatory, 10m Keck II, Nirspec Spectrograph	2006-2008
32 nights, Lick Observatory, 3.0m Shane, KAST + Hamilton Spectrographs	2004-2006
18 nights, Lick Observatory, 1.0m Nickel, CCD imaging	2004

Co-Investigator: (significant role):

2672 hours, Spitzer Space Telescope, warm IRAC imaging, and multiple ground-based supporting observations	2009-2013
2 nights, Keck Observatory	2009A,2012B

Research Students and Postdocs

Bryson Cale	Masters	MSU	2016-current
Patrick Newman	Masters	MSU	2016-current
Shannon Dulz	Undergraduate	MSU	2016-current
America Nishimoto	Undergraduate	MSU	2016-current
Chris Klenke	Undergraduate	MSU	2016-current
Frank Giddens	Undergraduate	MSU	2016-current
Andrew Cancino	Undergraduate	MSU	2016-current
Denise Weigand	Undergraduate	Central Methodist U	2016
Joseph Huber	Undergraduate	MSU	2015-current

Ryan Hall	Undergraduate	MSU	2015-current
Perri Zilberman	High School	JFK, NY	2015-current
Claire Geneser	Undergraduate	MSU	2014-2016
	→ <i>Mississippi State PhD student in astronomy</i>		
Krishan Nelson	Undergraduate	MSU	2016
Joe Regan	Undergraduate	MSU	2015
Andrew Stufflebeam	Undergraduate	MSU	2014-2015
	→ <i>Network management for 600-person brewery</i>		
Garrett Pohl	Undergraduate	MSU	2014
Nick Ogden	Undergraduate	MSU	2014
Elise Furlan	Postdoctoral Scholar	NExSci/Caltech	2014
	→ <i>Caltech/IPAC Research Associate</i>		
Jonathan Gagne	Visiting graduate student	NExSci/U.Montreal	2014-2015
	→ <i>Carnegie DTM NASA Sagan Prize Postdoctoral Fellow</i>		
Michael Bottom	Graduate student	Caltech	2012-2013
Peter Gao	Graduate student	Caltech	2011-2015
	→ <i>NASA Ames Prize Postdoctoral Fellow</i>		
Huan Meng	Visiting graduate student	NExSci/U.Arizona	2013
	→ <i>University of Arizona postdoctoral scholar</i>		
Chris Bilinski	Undergraduate	Caltech	2010-2011
	→ <i>U. Arizona Graduate School in astronomy</i>		
Sean Mills	Undergraduate	Caltech	2010-2012
	→ <i>U. Chicago Graduate School in astronomy</i>		
Tina Gueth	Research Assistant	Caltech	2010
	→ <i>New Mexico Tech graduate student in physics</i>		
J. Rob Parks	Visiting graduate student	NExSci/Georgia State	2009-2010
	→ <i>Georgia State postdoctoral scholar</i>		
Nadanai Laohakunakorn	Visiting undergraduate	Caltech/UK	2009
	→ <i>University College London Graduate School in Applied Physics</i>		
Giri Gopalan	Undergraduate	Caltech	2009
	→ <i>Harvard Graduate School in Statistics</i>		
Alan Gee	Undergraduate	Caltech	2007
	→ <i>MIT Lincoln Labs</i>		
Lisbeth Jensen	Undergraduate	UCLA	2005
	→ <i>Cal State Northridge Masters in Astronomy</i>		
Patricia Wells	Undergraduate	UCLA	2005

National Service

WFIRST Target Selection Working Group	2017-current
TESS Target Selection Working Group	2013-current
LSST Stellar Populations Science Collaboration	2011-current
Executive Committee, NASA Exoplanet Exploration Program Analysis Group	2012-2016
Kepler GO Review Panel	2015
Kepler PSP Review Panel	2013
NSF Proposal Review Panel	2013
Kepler GO Review Panel, Cycle 3	2011

Referee, Astronomy & Astrophysics	2015
Referee, Monthly Notices of the Royal Astronomical Society	2012-2013
Referee, Astrophysical Journal	2012
Referee, Astronomical Journal	2010
SOC: Extreme Radial Velocities II, Yale	2015
Co-Chair, Cool Stars 16 Splinter Session	2010
LOC: PSU/CEHW/NExSci Precision RV Workshop	2010
Volunteer: "Ask an Astronomer," Annual JPL Open House	2008-2010
LOC: 5th Spitzer Conference: New Light on Young Stars	2008
LOC: Annual JPL Spitzer Science Fair	2007, 2008

Refereed Journal Publications

h-index: 26 all, 9 first author; **bold** – first author; **blue** – student paper/second author

Fischer, D., ..., Plavchan, P., et al., "State of the Field: Precision Radial Velocities" 2016, *Publications of the Astronomical Society of the Pacific*, 128, 6001

Gagne, J., Plavchan, P., et al., "A High-Precision Near-Infrared Survey for Radial Velocity Variable Low-Mass Stars Using CSHEL and a Methane Gas Cell," 2016, *Astrophysical Journal*, 822, 40

Gao, P., Plavchan, P., et al., "Retrieval of Precise Radial Velocities from Near-Infrared High Resolution Spectra of Low Mass Stars," 2016, *Publications of the Astronomical Society of the Pacific*, 128, 4501

Gopalan, G., Plavchan, P., ..., "Application of the Trend Filtering Algorithm for Photometric Time Series Data," 2016, *Publications of the Astronomical Society of the Pacific*, 128, 4504

Krick, J., ..., Plavchan, P., ..., "Spitzer IRAC Sparsely Sampled Phase Curve of the Exoplanet WASP-14b," 2016, *Astrophysical Journal*, 824, 27

Meng, Huan Y.A., Plavchan P., ..., "Photo-reverberation Mapping of a Protoplanetary Accretion Disk around a T Tauri Star ," 2016, *Astrophysical Journal*, 823, 58

Vanderburg, A., Plavchan, P., Johnson, John Asher, Ciardi, David, Swift, Jonathan, & Kane, Stephen, "The Golidlocks Trap: Stellar Activity Masquerading as Habitable Exoplanets," 2016, *Monthly Notices of the Royal Astronomical Society*, 459, 3565

Yi, Xu, ..., Plavchan, P., ..., "Demonstration of a Near-IR Laser Comb for Precision Radial Velocity Measurements in Astronomy," 2016, *Nature Communications*, 710436

Ciardi, D., ..., Plavchan, P., ..., "Confirmation of the Orbital Precession and the Planetary Status of PTF0 8-8695B: A Jupiter-Mass Planet Orbiting a 3 Myr Old T-Tauri Star," 2015, *Astrophysical Journal*, 809, 42

Metchev, S., ..., Plavchan, P., ..., "Weather on Other Worlds. II. Survey Results: Spots are Ubiquitous on L and T Dwarfs " 2015, *Astrophysical Journal*, 799, 154

Mullally, F., ..., Plavchan, P., ..., “Planetary Candidates Observed by Kepler VI: Planet Sample from Q1-Q16 (47 months),” 2015, *Astrophysical Journal Supplement*, 217, 31

Plavchan, P., Chen, Xi, & Pohl, Garrett, “What is the Mass of Alpha Cen B b?” 2015, *Astrophysical Journal*, 805, 174

Poppenhaeger, K., ..., Plavchan, P., ..., “YSOVAR: Mid-infrared Variability of Young Stellar Objects and Their Disks in the Cluster IRAS 20050+2720,” 2015, *Astronomical Journal*, 150, 118

Rebull, L., ..., Plavchan, P., ..., “YSOVAR: Mid-Infrared Variability in NGC 1333,” 2015, *Astronomical Journal*, in press

Stauffer, J., ... Plavchan, P., ..., “CSI 2264: Characterizing Young Stars in NGC 2264 with short-duration, periodic flux dips in their light curves,” 2015, *Astronomical Journal*, 149, 130

Swift, J.,..., Plavchan, P., ..., “Miniature Exoplanet Radial Velocity Array (MINERVA) I. Design, Commissioning, and First Science Results,” 2015, *JATUS*, 1, 2

Wittenmyer, R., ... Plavchan, P., ..., “MINERVA: Small Planets from Small Telescopes,” 2015, *Publications of the Korean Astronomical Society*, 30, 665

Wolk, S., ... Plavchan, P., ..., “YSOVAR: Mid-infrared Variability Among YSOs in the Star Formation Region GGD12-15,” 2015, *Astronomical Journal*, 150, 145

Burgasser, A., ..., Plavchan, P., ..., “A Monitoring Campaign for Luhman 16AB. I. Detection of Resolved Near-Infrared Spectroscopic Variability,” 2014, *Astrophysical Journal*, 785, 48

Cody, A.M.,...,Plavchan, P.,..., “CSI 2264: Simultaneous Optical and Infrared Light Curves of Young Disk-Bearing Stars in NGC 2264 with CoRoT and Spitzer– Evidence for Multiple Origins of Variability,” 2014, *Astrophysical Journal*, 147, 82

Guenther, M., ...Plavchan, P.,..., “YSOVAR: Mid-IR Variability in the Star Forming Region Lynds 1688,” 2014, *Astrophysical Journal*, 148, 122

Meng, Huan Y. A., ...,Plavchan, P.,..., “Large Impacts around a Solar Analog Star in the Era of Terrestrial Planet Formation,” 2014, *Science*, 345, 1032

Parks, J.R., Plavchan, P., White, R., & Gee, A.H., “Periodic and Aperiodic Variability in the Molecular Cloud Rho Ophiuchus,” 2014, *Astrophysical Journal Supplement*, 211, 3

Plavchan, P., Bilinski, C., & Currie, T., “Validation of Kepler Objects of Interest Stellar Parameters from Observed Transit Durations,” 2014, *Publications of the Astronomy Society of the Pacific*, 126, 34

Rebull, L., ...,Plavchan, P.,..., “YSOVAR: Long Timescale Variations in the Mid-Infrared,” 2014, *Astronomical Journal*, 148, 92

Stauffer, J.,...,Plavchan, P.,..., “CSI 2264: Characterizing Accretion-Burst Dominated Light Curves for Young Stars in NGC 2264,” 2014, *ApJ*, 147, 83

Akeson, R.L., ..., Plavchan, P., ..., "The NASA Exoplanet Archive: Data and Tools for Discovering Exoplanets," 2013, *Publications of the Astronomy Society of the Pacific*, 125, 989

Heinze, A., ..., Plavchan, P., "Weather on Other Worlds I: Detection of Periodic Variability in the L3 Dwarf DENIS-P J1058.7-1548 with Precise Multi-Wavelength Photometry," 2013, *ApJ*, 767, 173

Mighell, K., & Plavchan, P., "Period Error Estimation for the Kepler Eclipsing Binary Catalog," 2013, *Astronomical Journal*, 145, 148

Plavchan, P., Gueth, Tina, Laohakunakorn, N., & Parks R., "The Identification of 92.3 Day Periodic Photometric Variability for YSO YLW 16A ," 2013, *Astronomy & Astrophysics*, 554, 110

Plavchan, P., & Bilinski, C., "Stars Do Not Eat Their Young Planets – Empirical Constraints On Planet Migration Halting Mechanisms," 2013, *Astrophysical Journal*, 769, 86

Anglada, G., Plavchan, P., et al., "Design and Construction of Absorption Cells for Precision Radial Velocities in the K-band using methane isotopologues," 2012, *Publications of the Astronomy Society of the Pacific*, 124, 586

Currie, T.C., Fukagawa, M., Thalmann, C., Matsumura, S., & Plavchan, P., "Direct Detection and Orbit Analysis of HR 8799 bcd From Archival 2005 Keck/NIRC2 Data," 2012, *Astrophysical Journal Letters*, 755, 34

Currie, T.C., Rodigas, T., Debes, J., Plavchan, P., Kraus, A., Jang-Condrell, H., & Kuchner, M., "Keck/NIRC2 Imaging of the Warper, Asymmetric Debris Disk Around HD 32297," 2012, *Astrophysical Journal*, 757, 28

Faesi, C., ... Plavchan, P., ..., "Potential Drivers of Mid-infrared Variability in Young Stars: Testing physical models with multi-epoch NIR spectra of YSOs in Rho Oph," 2012, *Publications of the Astronomy Society of the Pacific*, 124, 1137

Krist, J., Stapelfeldt, K., Bryden, G., & Plavchan, P., "HST Observations of the HD 202628 Debris Disk," 2012, *Astronomical Journal*, 144, 45

Morales-Calderon, M., ..., Plavchan, P., ..., "YSOVAR: Five Pre-Main-Sequence Eclipsing Binaries in the Orion Nebula Cluster," 2012, *Astrophysical Journal*, 753, 149

Van Eyken, Julian, ..., Plavchan, P., ..., "The PTF Orion Project: PTFO 8-8695, a Planetary Candidate Transiting a T-Tauri Star," 2012, *Astrophysical Journal*, 755, 42

Ciardi, D., von Braun, K., Bryden, G., van Eyken, J., Howell, S., Kane, S., Plavchan, P., Ramirez, SS, & Stauffer, J., "Characterizing the Variability of Stars with Early-Release Kepler Data," 2011, *Astronomical Journal*, 141, 108.

Golimowski, D., ..., Plavchan P., ..., "Hubble and Spitzer Space Telescope Observations of the Debris Disk Around the Nearby K Dwarf HD 92945," 2011, *Astrophysical Journal*, 142, 30

Morales-Calderon, M., ... , Plavchan, P., “YSOVAR: the first sensitive, wide-area, mid-IR photometric monitoring of the ONC,” 2011, *Astrophysical Journal*, 733, 50

Van Eyken, Julian, ... , Plavchan, P., ... , “The PTF Orion Program: Binaries and YSOs,” 2011, *Astronomical Journal*, 142, 60

Stauffer, J., ... , Plavchan, P., ... , “Accurate Coordinates and 2MASS Cross-IDs for (Almost) All Gliese Catalog Stars,” 2010, *Publications of the Astronomy Society of the Pacific*, 122, 885

Marsh, K.A., Plavchan, P., Kirkpatrick, J.D., Lowrance, P., Cutri, R., & Velusamy, T., “Deep Near-Infrared Imaging of the Rho Oph Cloud Core: Clues to the Origin of the Lowest-Mass Brown Dwarfs,” 2010, *Astrophysical Journal*, 719, 550

Sierchio, J.M., Rieke, G.H., Su, K.Y.L., Plavchan, P., Stauffer, J.R., & Gorlova, N.I., "Debris Disks around Solar-Type Stars: Observations of the Pleiades with Spitzer Space Telescope," 2010, *Astrophysical Journal*, 712, 1421

Marsh, K.A., Kirkpatrick, J.D., & Plavchan, P., "A Young Planetary-Mass Object in the Rho Oph Cloud Core," 2010, *Astrophysical Journal*, 709, 158

Currie, T.C., Lada, C., Plavchan, P., Irwin, J., Kenyon, S., & Muench, A., “The Last Gasp of Gas Giant Planet Formation: A Spitzer Study of the 5 Myr-old Cluster NGC 2362,” 2009, *Astrophysical Journal*, 698, 1

Morales, Farisa Y., Werner, M.W., Bryden, G., Plavchan, P., et al., “Mid-IR Spectra of Dust Debris around A and late B type Stars: Asteroid Belt Analogs and Power-Law Dust Distributions,” 2009, *Astrophysical Journal*, 699, 1067

Plavchan, P., Werner, M., Chen, C., Stapelfeldt, Patten, B., Song, I., & Stauffer, J., “New Debris Disks Around Young Solar Analogs Discovered with the Spitzer Space Telescope,” 2009, *Astrophysical Journal*, 698, 1068

Solano, E., ... , Plavchan P., ... , “The LAEX and NASA Portals for CoRoT Public Data,” 2009, *Astronomy and Astrophysics*, 506, 455

Plavchan, P., Gee, Alan H., Stapelfeldt, K., & Becker, A., “The Peculiar Periodic YSO WL 4 in Rho Ophiuchus,” 2008, *Astrophysical Journal Letters*, 684, L37

Plavchan P., Jura M., Kirkpatrick D., Cutri R., & Gallagher, S.C., “Near-Infrared Variability in the 2MASS Calibration Fields: A Search for Planetary Transit Candidates,” *Astrophysical Journal Supplement*, 2008, 175, 191

Becker, A., ... , Plavchan, P., ... , “2MASS J01542930+0053266: A New Eclipsing M-Dwarf Binary System,” 2008, *Monthly Notices of the Royal Astronomical Society*, 386, 416

Currie, T.C., Plavchan, P., & Kenyon, S., “A Spitzer Study of Debris Disks In The Young Nearby Cluster NGC 2232: Icy Planets Are Common Around ~ 1.5–3 Solar-Mass Stars”, 2008, *Astrophysical Journal*, 688, 597

Plavchan P., Jura M., & Lipsy S.J., “Where are the M Dwarf Disks Older Than 10 Million Years?” 2005, *Astrophysical Journal*, 631,1161.

Lipsy S.J. & Plavchan P., “Globular Cluster Formation in M82,” 2003, *Astrophysical Journal Letters*, 603, 82

Jura M., Chen C., & Plavchan P., “The Massive Disk around OH 231.8+4.2,” 2002, *Astrophysical Journal*, 574, 963

Jura M., Chen C., & Plavchan P., “The Very Slow Wind from the Pulsating Semiregular Red Giant, L₂ Puppis,” 2002, *Astrophysical Journal*, 569, 964

Other Publications

Gaudi, B. Scott, ..., Plavchan, P., ..., “Exoplanet Exploration Program Analysis Group (ExoPAG) Report to Paul Hertz Regarding Large Mission Concepts to Study for the 2020 Decadal Survey,” 2015, Exoplanet Program Analysis Group white paper

Plavchan, P., et al., “Precise Near-Infrared Radial Velocities,” 2015, Proceedings of the International Astronomical Union Symposium #314, “Young Stars and Planets Near the Sun,” J. H. Kastner, B. Stelzer, & S. A. Metchev, eds., in press

Plavchan, P., et al., “Radial Velocity Prospects Current and Future,” 2015, Exoplanet Exploration Program Analysis Group white paper, arXiv 1503.01770

Bottom, M., ..., Plavchan, P., ..., “Design, motivation, and on-sky tests of an efficient fiber coupling unit for 1-meter class telescopes.”, 2014, SPIE, 9147, 2E

Osterman, S., ..., Plavchan, P., “Near field modal noise reduction using annealed optical fiber”, 2014, SPIE, 9147, 5C

Plavchan, P., et al., “Precision near-infrared radial velocity instrumentation I: absorption gas cells”, 2013, SPIE, in *Optical Engineering + Applications*, 8864, 1J

Plavchan, P., et al., “Precision near-infrared radial velocity instrumentation II: noncircular core fiber scrambler”, 2013, SPIE, in *Optical Engineering + Applications*, 8864, 0G

Beichman, C., Ciardi, D., Akeson R., Plavchan, P., et al. “New Uses for the Kepler Telescope: A Survey of the Ecliptic Plane for Transiting Planets and Star Formation,” 2013, Kepler contributed white paper

Burgasser, A., Faherty, J., Beletsky, Y., Plavchan, P., et al., “Luhman 16AB: A Remarkable, Variable L/T Transition Binary 2 pc from the Sun,” 2013, Brown Dwarfs Coming of Age Conference Proceedings, in press.

Berriman, B. & Plavchan, P., “How can we use high-performance computing platforms to help dig out new exoplanets?” ISGTW, 4/3/2013, <http://www.isgtw.org/feature/how-can-we-use-hpc-platforms-help-dig-out-new-exoplanets>

Cody, A.M., ..., Plavchan, P., ..., “A Multi-Wavelength View of Star-Disk Interaction in NGC 2264,” 2013, Cool Stars 17 Conference Proceedings, *Astronomische Nachrichten*, in press.

Von Braun, K., ..., Plavchan, P., ..., "The NStED Periodogram Service and Interface for Public CoRoT Data," 2011, *Transiting Planets, Vibrating Stars, and Their Connection*, Conference Proceedings of the 2nd CoRoT Symposium, Eds: A. Baglin, M. Deleuil, E. Michel, C. Moutou

Covey, K., Plavchan, P., Bastien, F., Flaccomio, E., Flaherty, K., Marsden, S., Morales-Calderon, M., Muzerolle, J., Turner, N., "Young Stars in the Time Domain: A CS16 Splinter Summary," 2010, Cool Stars 16 Conference Proceedings, in press.

Pascucci, I., Laughlin, G., Gaudi, B. S., Kennedy, G., Luhman, K., Mohanty, S., Birkby, J., Ercolano, B., Plavchan, P., Skemer, A., "Planet Formation Around M-dwarf Stars From Young Disks to Planets", 2010, *Cool Stars 16 Conference Proceedings*, in press.

Berriman, B., ..., Plavchan, P., ..., "The NASA Exoplanet Science Institute Archives: KOA and NStED," 2010, *Astronomical Data Analysis Software and Systems XIX*. Proceedings of a conference held October 4-8, 2009 in Sapporo, Japan. Edited by Yoshihiko Mizumoto, Koh-Ichiro Morita, and Masatoshi Ohishi. ASP Conference Series, Vol. 434. San Francisco: Astronomical Society of the Pacific, 2010., p.119

Berriman, B., Deelman, E., Juve, G., Regelson, M., & Plavchan, P., "The Application of Cloud Computing to Astronomy: A Study of Cost and Performance," in *e-Science in Astronomy*, proceedings of the conference held December, 2010, in Brisbane Australia

Plavchan P., Bryden, G., Stapelfeldt, K., Werner, M., Rieke, G., & Lowrance, P., "AU Mic is Not Alone: New M Dwarf Debris Disks," in 5th Spitzer Conference: New Light on Young Stars: Spitzer's View of Circumstellar Disks, proceedings of the conference held 26-30 October, 2008, in Pasadena CA

Plavchan, P., Gee, Alan H., Stapelfeldt, K., & Becker, A., "The Peculiar Periodic YSO WL 4 in Rho Ophiuchus," in 15th Cambridge Work Shop on Cool Stars, Stellar Systems and the Sun, ASP Conference Series, proceedings of the conference held 21-25 July, 2008, in St. Andrews, Scotland. Edited by E. Stempels

Plavchan P., Jura M., & Lipsy S.J., "Where are the M Dwarf Exo-Zodiacal Disks?" in The Spitzer Space Telescope: New Views of the Cosmos, ASP Conference Series, Volume 357, proceedings of the conference held 9-12 November, 2004 in Pasadena, California, USA. Edited by L. Armus and W.T. Reach. San Francisco: Astronomical Society of the Pacific, 2006., p.127

Plavchan, P. & Jura, M., "M Dwarf Transit Survey with the 2MASS Calibration Database" in Protostars and Planets V, Proceedings of the Conference held October 24-28, 2005, in Hilton Waikoloa Village, Hawai'i. LPI Contribution No. 1286, p.8641

Plavchan P., Jura M., & Lipsy S.J., "The Case of the Missing Disks," 2005, Press Release presented at the 205th Meeting of the American Astronomical Society, San Diego, CA

Recent Talks

“Forbidden Planet,” invited, Movie and a Lecture, Moxie Theater, Springfield, Missouri	2017/04/11
“The Golden Age of Exoplanet Discovery,” invited, Kansas City Astronomical Society, Missouri	2017/03/25
“The Golden Age of Exoplanet Discovery,” invited, St Louis Astronomical Society, Missouri	2017/01/20
“Discovery of A Jovian Planet Candidate Around AU Mic,” contributed, 229 th meeting of the American Astronomical Society, Grapevine, TX	2017/01/06
“Overview of Coming IR PRV Machines,” invited, NASA TESS mission science team meeting, MIT	2017/12/09
“Plans for Evaluating the Impact of Precursor RV Observations,” invited, HabEx Science and Technology Definition Team Meeting, New Haven, CT	2016/11/10
“The Golden Age of Exoplanet Discovery,” invited, The Library Center, Armchair Lecture Series, Springfield, Missouri	2016/10/26
“The Golden Age of Exoplanet Discovery,” invited, Springfield Astronomical Society, Missouri	2016/09/27
“Astrostatistics: The intersection of Astronomy and Math,” invited, MSU Math Student Association	2016/09/26
“Bears In The Know Luncheon Series: Exoplanets,” invited, MSU	2016/09/22
“Approaching the Stellar Astrophysical Limits to Exoplanet Detection: Getting to 10 cm/s,” invited, Aspen Center for Physics	2016/08/29
“The Promise of Multi-Wavelength Precise Radial Velocity Surveys for Exoplanets,” invited, NASA Goddard, Maryland	2016/06/20
“The Promise of Multi-Wavelength Precise Radial Velocity Surveys for Exoplanets,” contributed, Caltech IPAC, Pasadena, CA	2016/06/08
“The Promise of Multi-Wavelength Precise Radial Velocity Surveys for Exoplanets,” invited, NASA JPL, Pasadena, CA	2016/05/19
“The Golden Age of Exoplanet Discovery,” invited, Astrobiology Symposium University of Missouri, St Louis	2016/04/08
“Precise Radial Velocities and other Exoplanet Science Initiatives,” invited, Truman State University Colloquium	2016/02/19
“The Latest Results from Project NIRRVS: Precise Near Infrared Radial Velocity Surveys,” contributed, 227 th meeting of the American Astronomical Society, Kissimmee, FL	2016/01/06
“Project NIRRVS: Precise Near Infrared Radial Velocity Surveys of Low-Mass M Dwarfs,” invited colloquium, Penn State University	2015/11/16
“Finding Exoplanets with the Radial Velocity Method,” invited colloquium, University of Missouri, Kansas City	2015/11/06
“The Golden Age of Exoplanets,” invited, CNAS Public Lecture Series, Missouri State University	2015/10/13
“The Golden Age of Exoplanets,” invited, Ozark Maker Faire, Springfield, MO	2015/08/29
“Precise Near-Infrared Radial Velocities with CSHELL, iSHELL and MINERVA-RED,” contributed, Pathways to Habitable Exoplanets II, Bern, Switzerland	2015/07/15

“The Golden Age of Exoplanets,” invited Banquet keynote, Missouri Spacegrant Consortium Annual Meeting	2015/04/24
“Precise Radial Velocities and other Exoplanet Science Initiatives,” contributed, Mid-American Regional Astrophysics Conference	2015/04/17
“Precise Radial Velocities and other Exoplanet Science Initiatives,” Origins Seminar, University of Arizona	2015/03/19
“Precise Radial Velocities and other techniques for the detection of exoplanets,” invited, University of Missouri, Columbia	2015/02/23
“Precise Radial Velocities and other techniques for the detection of exoplanets,” invited, Missouri State University	2015/02/06
“NASA Exo-PAG Radial Velocity Study Analysis Group,” invited, Exo-PAG11	2015/01/03
“Project NIRRVS: Precise Near-Infrared Radial Velocity Survey,” invited, University of Missouri, St Louis	2014/11/07
“Project NIRRVS: Precise Near-Infrared Radial Velocity Survey,” invited, Missouri State University	2014/04/15
“Project NIRRVS: Precise Near-Infrared Radial Velocity Survey,” contributed, Greater IPAC Science Symposium, Caltech	2014/03/27
“Project NIRRVS: Precise Near-Infrared Radial Velocity Survey,” invited, Tel Aviv University, Israel	2014/03/19
“Investigation of Kepler Objects of Interest Stellar Parameters from Observed Transit Durations,” invited, Tel Aviv University, Israel	2014/03/18
“Project NIRRVS: Precise Near-Infrared Radial Velocity Survey,” invited, Weizmann Institute, Israel	2014/03/17
“Precise Near-Infrared Radial Velocities,” contributed, 223rd Meeting of the American Astronomical Society, Washington, DC	2014/01/09
“NASA Exo-PAG Radial Velocity Study Analysis Group,” invited, Exo-PAG 9	2014/01/04
“Investigation of Kepler Objects of Interest Stellar Parameters from Observed Transit Durations,” Kepler Science Conference 2, NASA Ames, CA	2013/11/05
“NASA Exo-PAG Radial Velocity Study Analysis Group,” invited, Exo-PAG 8	2013/10/05
“Precision Near-Infrared Radial Velocity Instrumentation II: Non-circular Core Fiber Scrambler,” SPIE, San Diego, CA	2013/08/27
“Precision Near-Infrared Radial Velocity Instrumentation and Exoplanet Survey,” contributed, 221st Meeting of the American Astronomical Society, Long Beach, CA	2013/01/07
“NASA Exo-PAG Radial Velocity Study Analysis Group,” invited, Exo-PAG 7	2013/01/05
“Precision Near-Infrared Radial Velocities,” contributed, JPL, Astrophysics Science Fair	2012/11/19
“Radial Velocity Surveys,” invited, How to Find Out Nearest Neighbors, Lorentz Center Workshop, Leiden, Netherlands	2012/10/22
“NASA Exo-PAG Radial Velocity Study Analysis Group,” invited, Exo-PAG 6	2012/10/14
“NIRSPEC Upgrade Design Study,” invited, Keck Science Steering Committee	2012/06/20
“The Quest for Exoplanets,” invited, Physics Colloquium, RIT	2012/05/31
“The Hunt for Exoplanets,” invited, Capital Area Amateur Astronomers, Michigan	2012/05/02
“Near-Infrared Precision Radial Velocities Update,” contributed, Greater IPAC Science Symposium, Caltech	2012/03/19
“Time Series Data Sets and Tools at the NASA Exoplanet Archive,” contributed, Caltech Time Domain Forum	2012/02/09
“New Near-IR Techniques for Precision Radial Velocities,” invited, Georgia State University colloquium	2011/11/29

“A Concept for an Extremely Large Telescope in Space,” contributed, JPL CubeSat Symposium	2011/08/15
“Near-Infrared Radial Velocities,” contributed, Greater IPAC Science Symposium, Caltech	2011/05/11
“Near-Infrared Radial Velocities,” contributed, Exploring Strange New Worlds: From Giant Planets to Super Earths, Flagstaff, AZ	2011/05/06
“Young Stars in the Time Domain,” Space Telescope Science Institute, Star and Planet Formation Journal Club	2010/12/13
“Near-Infrared Radial Velocities with NIRSPEC,” contributed, Keck Science Meeting, UC Berkeley	2010/10/16
“The Future of Near-Infrared Radial Velocities,” JPL Exoplanet Program Planning Retreat, Ventura, CA	2010/09/22
“M Dwarf Debris Disks,” contributed, Cool Stars 16, Seattle, WA	2010/08/29
“The Future of Near-Infrared Radial Velocities,” contributed, Astronomy of Exoplanets with Precise Radial Velocities, Penn State, PA	2010/08/19
“Exploiting the Variability of Young Stars,” invited, Greater IPAC Science Symposium, Caltech	2010/05/11
“Young Stars in the Time Domain,” invited, Carnegie DTM	2010/04/30
“Adding a LASER Frequency Comb to NIRSPEC,” Keck Science Meeting, Caltech	2009/09/21
“New M Dwarf Debris Disks Discovered with the Spitzer Space Telescope,” 214th Meeting of the American Astronomical Society, Pasadena, CA	2009/06/11
“Detecting Transiting Planets – CoRoT and Systematic Sources of Error in Time-Series Data,” AY 218 Lecture, Caltech	2009/05/19
“Detecting Transiting Planets - Systematic Sources of Error in Time-Series Data and Period-Finding Algorithms,” Greater IPAC Technology Symposium, Caltech	2009/05/14
“New M Dwarf Debris Disks,” University of Arizona	2009/01/23
“New M Dwarf Debris Disks,” Greater IPAC Science Symposium, Caltech	2009/01/22
“MIPS Discovery of New M Dwarf Debris Disks,” Spitzer Science Fair, JPL	2008/10/21
“M Dwarf Disks,” Cool Stars 15, St Andrews, Scotland	2008/07/24
“Unveiling Disks Around M Dwarfs,” Stars and Brown Dwarfs Lunch Talk, Caltech	2008/04/25
“Unveiling Disks Around M Dwarfs,” Exoplanet Science Seminar, JPL	2008/04/24
“The Peculiar Periodic YSO WL4 in Rho Ophiuchus,” Caltech-Carnegie Postdoc Retreat	2008/04/14
“The Peculiar Periodic YSO WL4,” Disk Workshop, Caltech	2008/03/20
“The Peculiar Periodic YSO WL4,” Exoplanet Science And Technology Fair, JPL	2008/02/22
“The Peculiar Periodic YSO WL4 in Rho Ophiuchus,” 211 th Meeting of the American Astronomical Society, Austin TX	2008/01/11
“Unveiling Disks Around M Dwarfs,” CfA Journal Club, Harvard	2007/10/03
“New Debris Disks Around Young Solar Analogs Discovered With The Spitzer Space Telescope,” IAU Symposium No. 249, Suzhou, China	2007/10/26
“Prospecting for Transits in 2MASS and Other Surveys,” NAOJ, Mitaka, Japan	2007/10/15
“Prospecting for Transits in 2MASS and Other Surveys,” Michelson Science Center Workshop, NASA Ames	2007/07/27
“New Spitzer Debris Disks Around Young Solar Analogs,” Spitzer Science Fair, JPL	2007/05/22

“M Dwarf Planetary Systems,” Caltech-Carnegie Postdoc Retreat	2007/04/10
“M Dwarf Planetary Systems,” Monday Lunch Talks, JPL	2007/02/26
“M Dwarf Planetary Systems: A Transit Search with the 2MASS Calibration Database,” 209 th Meeting of the American Astronomical Society, Seattle, WA	2007/01/10
“A Transit Search with the 2MASS Calibration Database,” IPAC Science Seminar	2006/10/03
“Highlights from Protostars and Planets V,” Journal Club, UCLA	2005/11/29
“An M Dwarf Transit Search using the 2MASS Calibration Fields,” Solar, Stellar and Planetary Sciences Seminar, CfA, Harvard	2005/11/21
“An Odyssey of Near-Infrared Variability: The 2MASS Calibration Fields,” Journal Club, UCLA	2005/11/08
“See SPOT Run: The Spitzer Observation Planning Tool,” Journal Club, UCLA	2003/11/04