

Peter Plavchan

Staff Scientist
NASA Exoplanet Science Institute
California Institute of Technology
770 S Wilson Ave, Pasadena, CA 91125
(626) 234-1628
plavchan@ipac.caltech.edu

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

Awards and Honors

UCLA Physics Division Fellowship	2001-2006
Kobe International School of Planetary Sciences Fellowship	2005
Astronomy Department Outstanding Teaching Award	2002-2003
IBM Watson Fellowship	1996-2000

Research Experience

Staff Scientist , NASA Exoplanet Science Institute, Caltech, Pasadena, CA	2008-current
Post-Doctoral Scholar Caltech, Pasadena, CA	2006-2008
Doctoral Research University of California, Los Angeles Thesis Title: "M Dwarf Planetary Systems" Thesis Advisor: Professor Michael Jura	2004-2006
Graduate Research University of California, Los Angeles Research Advisor: Professor Michael Jura	2001-2004
Academic Part-Time Employee Jet Propulsion Laboratory, Pasadena, CA Supervisor: Dr. Mike Werner	1999-2001
Summer Undergraduate Research Fellow Caltech, Pasadena, CA Research Advisor: Dr. Mike Werner	1997,1999

Teaching Experience

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: 27 hours, Spitzer Space Telescope, MIPS imaging and IRS spectroscopy	GTO-4,5,GO-5
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

Refereed Journal Publications

Plavchan, P., et al., “New Debris Disks Around X-Ray Selected M Dwarfs Discovered with the Spitzer Space Telescope,” in prep.

Chen, C., Su, K., Plavchan, P., & Jura, M., “Circumstellar Disk Evolution in the Nearest OB Association,” in prep.

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,” in prep.

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,” 2008, *Astrophysical Journal*, submitted

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,” 2008, *Astrophysical Journal*, submitted

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,” 2008, *Astrophysical Journal*, submitted

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

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

Becker, A., ..., Plavchan, P., ..., “2MASS J01542930+0053266: A New Eclipsing M-Dwarf Binary System,” 2008, *MNRAS*, 386, 416

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 Select Publications

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, in press.

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, in press.

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

Cotera A. S., Werner M. W., & Plavchan P. P., "Confirmation of MIR Source Near SGR A*?" 1998, in *IAU Symposion #184: "The Central Regions of the Galaxy and Galaxies,"* Edited by Yoshiaki Sofue, 311

Recent Talks

“How Stars and Planets Form,” 5 th graders, Pasadena Unified School District	2008/11/06
“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	2008/11/29
“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