

CONTACT INFORMATION	601-C Campbell Hall Astronomy Department University of California, Berkeley Berkeley, CA 94720-3411	Fax: (510) 642-3411 Email: sloane@berkeley.edu Website: astro.berkeley.edu/~sloane
RESEARCH INTERESTS	Extrasolar planet detection and characterization, debris disk identification in scattered light, optical and infrared instrumentation (all stages), polarimetry, high contrast imaging	
EDUCATION	2003-2008	California Institute of Technology: Ph.D., Planetary Science, defended July 2008 Dissertation: “Unambiguous Black Hole Mass from Polarimetry and Application to Hot Jupiters”; Advisor: Shrinivas R. Kulkarni
	1999-2003	University of California, Santa Cruz: B.S., Physics with Astronomy minor, <i>summa cum laude</i> (4.0 GPA), graduated June 2003 Thesis: “Morphologies of Distant Galaxies”; Advisor: David C. Koo
RESEARCH POSITIONS	2008-present	Postdoctoral Scholar: Astronomy Department, University of California, Berkeley; Supervisors: James R. Graham and Paul Kalas
	2003-2008	Graduate Student Researcher: Astronomy Department, California Institute of Technology; Advisor: Shrinivas R. Kulkarni
	1999-2003	Undergraduate Research Assistant: Astronomy Department, University of California, Santa Cruz; Advisor: David C. Koo
HONORS AND AWARDS	2003	Honorable Mention, NSF Graduate Fellowship
	2003	Chancellor’s Award, UCSC (awarded to 1% of graduating class)
	2003	Deans’ Award, UCSC (awarded to 4% of graduating class)
	2003	Highest Honors in the Major, Physics, UCSC
	2003	Cowell College Honors, UCSC
	2003	NSF Research Experience for Undergraduates
	1999	President’s Undergraduate Fellowship, UCSC
	1999-2003	Regents Scholar, UCSC
	1999	Second Place, Jack Horkheimer Award for Exceptional Service by a Young Astronomer, Astronomical League (nationwide competition)
	1999	Fourth Place, National Young Astronomer Award, Astronomical League (nationwide competition)
TEACHING EXPERIENCE	California Institute of Technology Spring 2005, 2006 Graduate Teaching Assistant for <i>Introduction to the Solar System</i> , taught by Yuk Yung (2005) and Andrew Ingersoll (2006)	
	University of California, Santa Cruz Spring 2000 Private tutor for <i>Introduction to Calculus</i>	
OBSERVING EXPERIENCE	W. M. Keck Observatory	10-m: DEIMOS, NIRC, NIRC2 (LGS and NGS AO)
	Palomar Observatory	Hale 5-m: PHARO (NGS AO), POLISH*, STEPS, WIRC *Own instrument 60-inch Palomar Testbed Interferometer
	Lick Observatory	Shane 3-m: Hamilton Spectrograph, IRCAL (NGS AO), POLISH* Nickel 1-m: Direct Imaging Camera, POLISH*
	Table Mountain Observatory	Pomona 1-m
TECHNICAL EXPERIENCE	Optical design, specification determination, hardware integration, high speed data acquisition, instrument control software (GPIB, RS-232, Matlab), lab plans and testing, precision machining	
REFEREED PUBLICATIONS	<ol style="list-style-type: none"> Wiktorowicz, S.J. & Graham, J.R. 2010, <i>Astrophysical Journal</i>, “Significant Polarization of Exoplanet Host Stars,” to be submitted shortly. Wiktorowicz, S.J., Duchêne, G., & Graham, J.R. 2010, <i>Astrophysical Journal</i>, “Direct Detection of Debris Disks from Optical Polarimetry,” to be submitted shortly. 	

3. McBride, J., Graham, J.R., Macintosh, B., Beckwith, S., Marois, C., Poyneer, L., & **Wiktorowicz, S.J.** 2010, *Astrophysical Journal*, “Experimental Design for the Gemini Planet Imager,” to be submitted shortly.
4. Frisch, P.C., Andersson, B.-G., Berdyugin, A., Funsten, H.O., Magalhaes, M., McComas, D.J., Pirola, V., Schwadron, N.A., Slavin, J.D., & **Wiktorowicz, S.J.** 2010, *Astrophysical Journal*, 724, 1473, “Comparisons of the Interstellar Magnetic Field Directions obtained from the IBEX Ribbon and Interstellar Polarizations.”
5. Muterspaugh, M.W., Hartkopf, W.I., Lane, B.F., O’Connell, J., Williamson, M., Kulkarni, S.R., Konacki, M., Burke, B.F., Colavita, M.M., Shao, M., & **Wiktorowicz, S.J.** 2010, *Astronomical Journal*, 140, 1623, “The PHASES Differential Astrometry Data Archive II: Updated Binary Star Orbits and a Long Period Eclipsing Binary.”
6. Muterspaugh, M.W., Lane, B.F., Kulkarni, S.R., Konacki, M., Burke, B.F., Colavita, M.M., Shao, M., **Wiktorowicz, S.J.**, O’Connell, J. 2010, *Astronomical Journal*, 140, 1579, “The PHASES Differential Astrometry Data Archive I: Measurements and Description.”
7. Perrin, M.D., Graham, J.R., Larkin, J.E., **Wiktorowicz, S.**, Maire, J., Thibault, S., Fitzgerald, M.P., Doyon, R., Macintosh, B.A., Gavel, D.T., Oppenheimer, B.R., Palmer, D.W., Saddlemyer, L., & Wallace, J.K. 2010, *Proceedings of the SPIE*, 7736, 77365R, “Imaging Polarimetry with the Gemini Planet Imager.”
8. **Wiktorowicz, S.J.** 2009, *Astrophysical Journal*, 696, 1116, “Non-Detection of Polarized, Scattered Light from the HD 189733b Hot Jupiter.”
9. **Wiktorowicz, S.J.** & Matthews, K. 2008, *Publications of the Astronomical Society of the Pacific*, 120, 1282, “A High Precision, Optical Polarimeter to Measure Inclinations of High Mass X-Ray Binaries.”
10. Muterspaugh, M.W., Lane, B.F., Fekel, F.C., Konacki, M., Burke, B.F., Kulkarni, S.R., Colavita, M.M., Shao, M., & **Wiktorowicz, S.J.** 2008, *Astronomical Journal*, 135, 766, “Masses, Luminosities, and Orbital Coplanarities of the μ Orionis Quadruple Star System from PHASES Differential Astrometry.”
11. **Wiktorowicz, S.J.** & Ingersoll, A.P. 2007, *Icarus*, 186, 436, “Liquid Water Oceans in Ice Giants.”
12. Pravdo, S.H., Shaklan, S.B., **Wiktorowicz, S.J.**, Kulkarni, S., Lloyd, J.P., Martinache, F., Tuthill, P. G., & Ireland, M. J. 2006, *Astrophysical Journal*, 649, 389, “Masses of Astrometrically Discovered and Imaged Binaries: G78-28AB and GJ 231.1BC.”
13. Hansen, B.M.S., Kulkarni, S., & **Wiktorowicz, S.** 2006, *Astronomical Journal*, 131, 1106, “A Spitzer Search for Infrared Excesses around Massive Young White Dwarfs.”
14. Muterspaugh, M.W., Lane, B.F., Konacki, M., **Wiktorowicz, S.**, Burke, B.F., Colavita, M.M., Kulkarni, S.R., & Shao, M. 2006, *Astrophysical Journal*, 636, 1020, “PHASES Differential Astrometry and Iodine Cell Radial Velocities of the κ Pegasi Triple Star System.”

SELECTED
ABSTRACTS

- Wiktorowicz, S.J.** & Graham, J.R. 2011, American Astronomical Society Meeting 217, “Direct Detection of Exoplanets with Polarimetry,” in press.
- Wiktorowicz, S.J.**, Duchene, G., Graham, J.R., & Kalas, P. 2010, In the Spirit of Lyot Meeting, “Direct Polarimetric Detection of Scattered, Optical Light from Debris Disks.”
- Wiktorowicz, S.**, Graham, J.R., Duchene, G., & Kalas, P. 2010, *Bulletin of the American Astronomical Society*, 42, 582, “Anomalous Polarization of the Gamma Ophiuchi Debris Disk.”
- Wiktorowicz, S.J.** 2009, NASA Ames Solar-Extrasolar Meeting, “Non-Detection of Scattered Light from the HD 189733b Hot Jupiter.”
- Wiktorowicz, S.J.** & Graham, J. R. 2008, Center for Adaptive Optics Retreat, “Polarimetric Debris Disk Identification for GPI.”
- Wiktorowicz, S.J.** 2009, *Bulletin of the American Astronomical Society*, 41, 482, “Non-Detection of Polarized, Scattered Light from the HD 189733b Hot Jupiter.”
- Wiktorowicz, S.**, Matthews, K., & Kulkarni, S.R. 2007, *Bulletin of the American Astronomical Society*, 39, 874, “A High-Precision, Optical Polarimeter to Measure Inclinations of High Mass X-Ray Binaries.”
- Wiktorowicz, S.**, Kulkarni, S.R., Pravdo, S.H., & Shaklan, S.B. 2006, *Bulletin of the American Astronomical Society*, 38, 1125, “LGSAO Imaging of STEPS Astrometric Candidates.”
- Wiktorowicz, S.J.** & Ingersoll, A.P. 2004, *Bulletin of the American Astronomical Society*, 36, 1072, “Oceans in Cold, Water-Rich Planets.”

SELECTED TALKS	Mar. 2011	University of California, Santa Cruz, "Direct Detection of Exoplanets with Polarimetry," pending.	
	Jan. 2011	American Astronomical Society Meeting 217, "Direct Detection of Exoplanets with Polarimetry," pending.	
	Nov. 2010	University of California, Berkeley, "Direct Detection of Exoplanets with Polarimetry," pending.	
	Oct. 2010	Université Paris Diderot, "Direct Polarimetric Detection of Scattered, Optical Light from Debris Disks."	
	Jan. 2010	University of California, Berkeley, "Anomalous Polarization of the γ Ophiuchi Debris Disk and Polarimetry of Other Disks."	
	Jan. 2010	American Astronomical Society Meeting 215, "Anomalous Polarization of the γ Ophiuchi Debris Disk and Polarimetry of Other Disks."	
	Oct. 2009	Gemini Planet Imager Science Meeting, "High Resolution Spectroscopy."	
	Jan. 2009	American Astronomical Society Meeting 213, "Non-Detection of Polarized, Scattered Light from the HD 189733b Hot Jupiter."	
	Nov. 2008	Lawrence Livermore National Laboratory (invited), "Non-Detection of Polarized, Scattered Light from the HD 189733b Hot Jupiter."	
	Oct. 2008	University of California, Berkeley, "Unambiguous Hot Jupiter Mass from Polarimetry."	
	May 2008	Jet Propulsion Laboratory (invited), "A High-Precision Polarimeter to Measure Black Hole and Exoplanet Masses."	
	Jan. 2008	American Astronomical Society Meeting 211, dissertation talk, "A High-Precision, Optical Polarimeter to Measure Inclinations of High Mass X-Ray Binaries."	
	Dec. 2007	University of California, Berkeley (invited), "A High-Precision Polarimeter to Measure Black Hole and Exoplanet Masses."	
	Nov. 2007	California Institute of Technology, "A High-Precision Polarimeter to Measure Black Hole and Exoplanet Masses."	
	Nov. 2006	California Institute of Technology, "Unambiguous Hot Jupiter Masses through Polarimetry."	
	Nov. 2005	California Institute of Technology, "Ice Giants: Too Warm and Dry for Oceans?"	
	Nov. 2004	AAS Division of Planetary Sciences Meeting, "Oceans in Cold, Water-Rich Planets."	
	CONFERENCES ATTENDED	2010	In the Spirit of Lyot Meeting. Paris, France.
		2009	Gemini Planet Imager Science Meeting. Berkeley, CA.
		2009	NASA Ames Solar-Extrasolar Meeting. Moffett Field, CA.
2008		Center for Adaptive Optics Retreat. Lake Arrowhead, CA.	
2007		Thirty-Meter Telescope Workshop. Irvine, CA.	
2007–2011 (pending)		AAS Winter Meetings. Seattle, WA; Austin, TX; Long Beach, CA; Washington, DC.	
2006–2008, 2010		Keck Science Meetings. Irvine, Pasadena, Santa Cruz, Berkeley, CA.	
2006		Cool Stars Meeting. Pasadena, CA.	
2006		Palomar Science Meeting. Pasadena, CA.	
2004		AAS Division of Planetary Science Meeting. Louisville, KY.	
2004		Terrestrial Planet Finder Workshop. San Diego, CA.	
2004, 2009		Center for Adaptive Optics Summer School. Santa Cruz, CA.	
2004		Michelson Summer School. Pasadena, CA.	
SUCCESSFUL OR PENDING GRANTS	2010	PI, NSF AAG, "Direct Detection of Exoplanets and Debris Disks with Polarimetry," submitted, \$298,643 requested.	
	2009	Major sections written (PI Paul Kalas, UC Berkeley), NASA Origins, "Direct Detection & Characterization of Extra-Solar Planets," successful, disbursement pending, \$416,946.	
	2009	Major sections written (PI James Graham, UC Berkeley), NSF AST-0909188, "Direct Detection & Characterization of Extra-Solar Planets," 2009-present, \$415,335.	
	2008	Major sections written (PI James Graham, UC Berkeley), LLNL IGPP minigrant, "Direct Detection of Extrasolar Planets," 2008-2009, \$26,400.	
	2006	Moore Foundation Endowment, \$50,000.	

PEDAGOGY	2009-2010	Supervised Daniel Driver, UC Berkeley undergraduate class of 2011
	2009	Co-organizer, Gemini Planet Imager Science Meeting
	2009	Invited talk, Eastbay Astronomical Society, Chabot Space & Science Center
	2007	Career fair, Nightingale Middle School, L.A. Unified School District
MEDIA COVERAGE	Oct. 2006	KenCrowell.com: “No Ocean on Neptune–Yet.”
	Oct. 2006	UniverseToday.com: “Are There Oceans on Neptune?”
	Oct. 2006	EarthSky.com: “Study Suggests Possible Future Ocean on Neptune.”