

# Joshua Eisner

Astronomy MC 105-24  
California Institute of Technology  
Pasadena, CA 91125  
(626) 395-4976  
[jae@astro.caltech.edu](mailto:jae@astro.caltech.edu)

## EDUCATION

**Harvard University** A.B. Summa Cum Laude in Astronomy & Astrophysics and Physics, June 1999.  
Advisors: Lincoln Greenhill and James Moran.  
**Cambridge University (Emmanuel College)** Master of Philosophy in Physics, August 2000. Herchel  
Smith Harvard Scholar at the Cavendish Laboratory. Advisor: David Buscher.  
**California Institute of Technology** Ph.D. in Astrophysics, June 2005. Michelson Graduate Fellow.  
Advisors: Lynne Hillenbrand and Anneila Sargent.

## HONORS AND AWARDS

**Michelson Graduate Fellowship** California Institute of Technology 2002-2005  
**GBT Student Support Award** National Radio Astronomy Observatory 2003  
**Reed Fellowship** California Institute of Technology 2000-2001  
**Herchel Smith Harvard Scholarship** Cambridge University 1999-2000  
**Michelson Summer Research Fellowship** California Institute of Technology 1999  
**Phi Beta Kappa** Harvard University 1999  
**Hoopes Senior Thesis Prize** Harvard University 1999  
**Leo Goldberg Astronomy Thesis Prize** Harvard University 1998, 1999  
**NSF Summer Research Fellowship** National Radio Astronomy Observatory 1998  
**National Science Foundation Honorable Mention** 1999, 2000  
**John Harvard Scholarship** Harvard University 1997-1999  
**Harvard College Scholarship** Harvard University 1996-1997

## LEAD AUTHOR REFEREED PUBLICATIONS

**Observations of T Tauri Disks at Sub-AU Radii: Implications for Magnetospheric Accretion and Planet Formation** J.A. Eisner, L. Hillenbrand, R. White, R. Akeson, & A. Sargent, *Ap.J.*, 623, 952  
**Resolved Inner Disks around Herbig Ae/Be Stars** J.A. Eisner, B.F. Lane, L.A. Hillenbrand, R.L. Akeson & A.I. Sargent, 2004, *Ap.J.*, 613, 1049  
**Distribution of Circumstellar Disk Masses in the Young Cluster NGC 2024** J.A. Eisner & John M. Carpenter, 2003, *Ap.J.*, 598, 1341  
**Near-Infrared Interferometric Measurements of Herbig Ae/Be Stars** J.A. Eisner, B.F. Lane, R.L. Akeson, L.A. Hillenbrand, & A.I. Sargent, 2003, *Ap.J.*, 588, 360  
**Detecting Outer Planets in Edge-On Orbits: Combining Radial Velocity and Astrometric Techniques** J.A. Eisner & S.R. Kulkarni, 2002, *Ap.J.*, 574, 426  
**Outflow 20-2000 AU from a High-Mass Protostar in W51-IRS2** J.A. Eisner, L.J. Greenhill, J.R. Herrnstein, J.M. Moran, & K.M. Menten, 2002, *Ap.J.*, 569, 334  
**Sensitivity of the Astrometric Technique in Detecting Outer Planets** J.A. Eisner & S.R. Kulkarni, 2001, *Ap.J.*, 561, 1107  
**Sensitivity of the Radial Velocity Technique in Detecting Outer Planets** J.A. Eisner & S.R. Kulkarni, 2001, *Ap.J.*, 550, 871

## INVITED TALKS

**Probing Sub-AU Radii of Young Circumstellar Disks** IPAC Astronomy Lunch Seminar, Pasadena, CA, October 27, 2004  
**Resolved Inned Disks around Herbig Ae/Be Stars: Near-IR Interferometry with PTI** Protoplanetary Disks Workshop, Ringberg Castle, Germany, April 16, 2004  
**Resolved Inned Disks around Herbig Ae/Be Stars: Near-IR Interferometry with PTI** JPL Astrophysics Luncheon Seminar, Pasadena, CA, March 15, 2004  
**Frequency, Mass, and Evolution of Young Circumstellar Disks** Astrobiology Graduate Conference, Tucson, AZ, January 7, 2004

## CONFERENCE PROCEEDINGS

**Near-IR Interferometric Observations of Herbig Ae/Be Stars** J.A. Eisner & B.F. Lane, 2003, Bulletin of the American Astronomical Society, Vol. 34, No. 4, 20.09

**Combining Astrometric and Radial Velocity Techniques for Detecting Outer Planets** J. A. Eisner & S. R. Kulkarni, 2001, Bulletin of the American Astronomical Society, Vol. 33, No. 2, 62.09

**SiO Masers, Water Masers, and Outflow in the W51-IRS2 star-forming region** J.A. Eisner, J.R. Herrnstein, L.J. Greenhill, & K. M. Menten, 1998, Bulletin of the American Astronomical Society, Vol. 30, No. 4, 71.13

## PROFESSIONAL SERVICE

**Referee** Refereed two research articles for *The Astrophysical Journal* and one for *Astronomy & Astrophysics*  
**TAC Member** Served on the time allocation committee for the *Owens Valley Millimeter Array* in Fall, 2003 and Spring, 2004

## OBSERVING EXPERIENCE

**Palomar Testbed Interferometer** Approximately 50 nights, 2001-2004

**Owens Valley Millimeter Array** Approximately 25 nights, 2002-2004

**Palomar 60-inch** 12 nights, 2002-2004

**Cambridge Optical Aperture Synthesis Telescope** 10 nights, 2000

**Cerro Tololo Inter-American Observatory 1.3m** 7 nights, 2004

**Palomar 200-inch (adaptive optics)** 4 nights, 2002-2004

**Keck Interferometer** 3 nights, 2003-2004

**Green Bank Telescope** 1 night, 2003

**Very Long Baseline Array** 1 night, 2004

## HARDWARE EXPERIENCE

**Palomar Testbed Interferometer** Installation and alignment of optics for new baseline; installation of delay-line rails; installation and alignment of new camera; routine system alignments and troubleshooting

**Owens Valley Millimeter Array** Troubleshooting, and fixing small problems; routine system alignments

**Cambridge Optical Aperture Synthesis Telescope** Determined pointing models for siderostats; wrote and implemented observing and data reduction procedures for simultaneous 3-telescope operation; measured scintillation in beam-combiner lab; routine system alignments

## OTHER WORK EXPERIENCE

**Guest Lecturer** Ay410: Stellar Astronomy, University of Southern California, November 8, 2004

**Teaching Assistant** Ay1: The Evolving Universe, CalTech, Spring, 2002 & Spring, 2003

**Teaching Assistant** Ay126: Interstellar Medium (Grad class), CalTech, Winter, 2002

**Teaching Assistant** Ay121: Radiative Processes (Grad class), CalTech, Fall, 2001

**Research Assistant** Dr. Gregory Levine, Hofstra University, Summer 1997

**American Express Financial Advisors** Summer Intern, 1997

**Rosenman and Colin, LLP** Summer Paralegal, 1996