

JACQUELINE K FAHERTY
Curriculum Vitae

American Museum of Natural History
Department of Astrophysics
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New York, NY 10023

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- Education** STONY BROOK UNIVERSITY Aug. 2004 – Aug. 2010
M.A 2006, Ph.D. in Astronomy expected, August 2010
Thesis Advisor: Frederick Walter (SBU) and Michael Shara (AMNH)
- UNIVERSITY OF NOTRE DAME Aug. 1996 – Jan 2001
B.S. in Physics
- Honors** American Museum of Natural History Research Fellowship recipient, 2008
Best Poster Award: Cool Stars 15, 2008
Peter B Kahn Fellowship for travel to an International Conference, 2007
Ford Pre Doctoral Fellowship Honorable Mention, 2007
Semi-finalist NASA JFPF Graduate Student fellowship, 2006
Outstanding Teaching Assistant Award, Stony Brook University, 2006
Teaching Materials Award of Distinction (for DTU Teachers Manual), AMNH, 2002
Outstanding Undergraduate Research Award, University of Notre Dame, 2001
Northwestern REU Fellow 1999
Fulbright Grant Semi-Finalist, 2001
New York State Regents Scholar Award, 1996
New York State Scholar Athlete Award, 1996
- Research Experience** GRADUATE RESEARCH ASSISTANT, AMNH Sept. 2006 – Present
Supervisor: Michael Shara
Project: Kinematics of low mass stars and brown dwarfs; Identification of new Wolf-Rayet stars
- GRADUATE RESEARCH ASSISTANT, SBU May. 2005 – Aug. 2006
Supervisor: Frederick Walter
Project: Parallax and Proper Motion measurement of the neutron star Geminga with HST data
- UNDERGRADUATE RESEARCH ASSISTANT, U. NOTRE DAME Sept. 1999 – May 2001
Supervisor: Grant Matthews
Project: Optical Counterpart follow-up to GRBs
- NORTHWESTERN SUMMER REU STUDENT, EVANSTON IL Jun. 2000 – Aug. 2000
Supervisor: Lynn Johnson Project: Maximizing Beta double prime obtained during plasma sintering
- Research Interests** Properties of brown dwarfs and extrasolar planets
Kinematics, Astrometry
Star and Planet Formation
Direct detection of extrasolar planets
Wolf-Rayet Stars
- Professional Memberships** American Astronomical Society
National Society of Black Physicists
American Association of University Women

Observing Experience	CTIO: Blanco 4.0m, 1.5m, 0.9m 1.3m with near-IR instruments ISPI, CPAPIR, ANDICAM optical imager CFIM; RC spectrograph; Echelle spectrograph LCO: Clay and Baade 6.5m with MagE and LDSS-3 Spectrographs; PANIC near-IR imager MDM: 1.3m with TIFKAM near-IR imager IRTF: 3.5m with SpeX near-IR spectrograph	
Teaching and Outreach	ADJUNCT, CITY UNIVERSITY OF NEW YORK (CUNY) Online Instructor for Space Time and Motion Course	Spring 2008- Present
	LECTURER, HAYDEN PLANETARIUM Presenter for Virtual Universe and Celestial Highlights monthly Planetarium programs	Summer 2004 - Present
	TEACHING ASSISTANT, STONY BROOK UNIVERSITY Led practical portion of Observational Astronomy for majors.	Fall 2004, Spring 2005
	INSTRUCTOR, AMATEUR ASTRONOMERS OF NEW YORK Instructor for Introduction to Astronomy and Cosmology courses	Fall, Winter, Spring, 2002, 2003
	PROFESSIONAL DEVELOPMENT INSTRUCTOR, AMNH Designed workshops for teachers from NYC schools on how to use AMNH as an Astronomy resource.	Spring 2002 - Fall 2004
	PUBLIC TALKS AMNH Virtual Universe and Celestial Highlights Talks (6-10 each year) Columbia University Outreach Talk on Astronomy in the Public Media Amateur Astronomers of New Jersey Talk on Exoplanets	Fall 2001 – Present
Diversity Efforts	NATIONAL SOCIETY OF BLACK PHYSICISTS Attended annual meeting to give scientific talk and forge mentorships.	Winter 2009, 2010
	HAYDEN ASTROPHYSICS OUTREACH COORDINATOR, AMNH Created the Hayden Outreach program for middle-high school students.	Spring 2003 - Fall 2004
	ASTRONOMY MOVEABLE MUSEUM COORDINATOR, AMNH Created teaching materials then instructed with the moveable at various schools in NYC	Winter 2002 - Spring 2003
	INSTRUCTOR, AMNH Presenter with the Eugene Lang Middle School Outreach program	Fall 2002 - Present
	PRESENTER, TRENDSETTERS NETWORK CONFERENCE Speaker at an all girls event where female professionals look to mentor young women in Science	Fall 2002
	MENTOR, INTERMEDIATE SCHOOL 162 Arranged Astronomy activities for the after-school programs at IS162 in the Bronx	Fall 2003-Spring 2004
	PRESENTER, KIDS CORP DAY CAMP Provided Astronomy activities for students bused in from NYC by aid societies to rural NJ	Summer 2002
	PRESENTER, WIZARDS OUTREACH PROGRAM Mentored middle school females in Science through the WIZARDS outreach program	Fall 2001
Selected Scientific Talks	LEARNING FROM THE MOTIONS OF ULTRACOOL DWARFS: COMPANIONS, AGES, HIGHER ORDER MULTIPLICITY Recipes for Making Brownies: Theory vs. Observations, Netherlands 2009	

MEETING OUR COOL, FAST, BROWN DWARF NEIGHBORS
MDM Consortium Meeting, New York 2009

LEARNING FROM THE MOTIONS OF ULTRACOOL DWARFS
National Society of Black and Hispanic Physicist Annual Meeting, Nashville, 2009
New York Workshop on Computer, Earth, and Space Sciences, New York 2009

A NEW POPULATION OF SUBSTELLAR MASS OBJECTS IN ORION
Astronomical Society of New York Annual Meeting, 2007

References

ADAM J. BURGASSER
University of California, San Diego
Email: aburgasser@mail.ucsd.edu

MICHAEL M. SHARA
American Museum of Natural History
Email: mshara@amnh.org

FREDERICK M. WALTER
Stony Brook University
Email: fwalter@astro.sunysb.edu

JACQUELINE K FAHERTY
Publication List

**Refereed
Publications**

SPEX SPECTROSCOPY OF UNRESOLVED VERY LOW-MASS BINARIES. I. IDENTIFICATION OF SEVENTEEN CANDIDATE BINARIES STRADDLING THE L DWARF/T DWARF TRANSITION Burgasser, Adam J.; Cruz, Kelle L.; Cushing, Michael; Gelino, Chris R.; Looper, Dagny L.; **Faherty, Jacqueline K.**; Kirkpatrick, J. Davy; Reid; I. Neill; 2009, ApJ accepted

THE YOUNG, LOW-MASS ENIGMATIC VARIABLE TWA 30 Looper, Dagny L.; Bochanski, John J.; Mohanty, Subhanjoy; Burgasser, Adam J.; Mamajek, Eric E.; Herczeg, Gregory J.; West, Andrew A.; **Faherty, Jacqueline K.**, Rayner, John; Pitts, Mark A.; Kirkpatrick, J. Davy; 2009, ApJ accepted

THE BROWN DWARF KINEMATICS PROJECT II. DETAILS ON NINE WIDE COMMON PROPER MOTION VERY LOW-MASS COMPANIONS TO NEARBY STARS. **Faherty, Jacqueline K.**; Burgasser, Adam J.; Andrew A. West; John J. Bochanski; Cruz, Kelle L.; Shara, Michael M.; Walter, Frederick M.; 2009, AJ accepted 10/2009

THE BROWN DWARF KINEMATICS PROJECT I. PROPER MOTIONS AND TANGENTIAL VELOCITIES FOR A LARGE SAMPLE OF LATE-TYPE M, L, AND T DWARFS. **Faherty, Jacqueline K.**; Burgasser, Adam J.; Cruz, Kelle L.; Shara, Michael M.; Walter, Frederick M.; Gelino, Christopher R. 2009, AJ, 137, 1F.

2MASS J061640066407194: THE FIRST OUTER HALO L SUBDWARF Cushing, Michael C. ; Looper, Dagny.; Burgasser, Adam J.; Kirkpatrick, Davy; **Faherty, Jacqueline K.**; Cruz, Kelle.; Sweet, Anne; Sanderson, Robyn E.; 2009, ApJ, 696, 986.

THE TRIGONOMETRIC PARALLAX OF THE NEUTRON STAR GEMINGA **Faherty, Jacqueline K.**; Walter, Frederick.; Anderson, Jay.; 2007, Astrophysics and Space Science 308, 225

**Conference
Proceedings**

VERY LOW MASS OBJECTS IN ORION OB1A AND B Walter, Frederick M.; **Faherty, Jacqueline K.**; Sherry, William H.; Brittain, Sean; 2009, Proceedings on the 15th Cambridge Workshop on Cool Stars, 1094, 568.

A NEW POPULATION OF YOUNG BROWN DWARFS Cruz, Kelle L. ; Kirkpatrick, Davy.; Burgasser, Adam J.; Looper, Dagny; Mohanty, Subhanjoy; Prato, Lisa; **Faherty, Jacqueline K.**; Solomon, Adam.; 2008, Proceedings on the 14th Cambridge Workshop on Cool Stars, 384, 119.

THE BROWN DWARF KINEMATICS PROJECT **Faherty, Jacqueline K.**; Cruz, Kelle., Burgasser, Adam., Walter, Frederick., & Shara, Michael. 2008, IAU Symposium, Vol. 248, IAU Symposium, ed. W. J. Jin, I. Platais, & M. A. C. Perryman, 102103