

JACQUELINE K FAHERTY  
*Curriculum Vitae*

American Museum of Natural History  
Department of Astrophysics  
79th Street and Central Park West  
New York, NY 10023

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**Education**      STONY BROOK UNIVERSITY  
M.A Physics, 2006  
Ph.D. Physics & Astronomy, 2010  
Thesis Advisors: A. Burgasser (UCSD), M. Shara (AMNH), F. Walter (SBU)

UNIVERSITY OF NOTRE DAME  
B.S. Physics , 2001

**Honors and Awards**

Student Commencement Speaker at Stony Brook University's PhD Convocation, 2011  
Stony Brook President's Award for Distinguished Doctoral Students, 2011  
Astronomical Society of New York Graduate Dissertation Award, 2010  
Ford Pre Doctoral Fellowship Honorable Mention, 2007  
Semi-finalist NASA JFPF Graduate Student fellowship, 2006, 2007  
Teaching Materials Award of Distinction (for DTU Teachers Manual), AMNH, 2002  
Outstanding Undergraduate Research Award, University of Notre Dame, 2001  
Fulbright Grant Semi-Finalist, 2001  
New York State Regents Scholar Award, 1996  
New York State Scholar Athlete Award, 1996

**Grants**

NASA ROSES ADAP GRANT 2017-ADAP17-0067 BACKYARD WORLDS: FINDING NEARBY BROWN DWARFS THROUGH CITIZEN SCIENCE (PI M. Kuchner, Co-PI J. Faherty; allocated funds TBD )  
NASA ROSES ADAP GRANT 2016 ADAP16-001N A FULL SKY WISE-SELECTED CATALOG FROM WISE & NEOWISE DATA (PI P. Eisenhardt, Collaborator J. Faherty )  
NSF AST-1614527 UNDERSTANDING SUBSTELLAR ATMOSPHERES: CONSTRAINING PHYSICAL PROPERTIES AND TESTING MODELS FOR BROWN DWARFS AND EXOPLANETS (PI's K. Cruz, J. Faherty, E. Rice, \$565,658)  
HUBBLE FELLOWSHIP 2013 (\$374,112)  
NSF AST-1313278 COLLABORATIVE RESEARCH: DECIPHERING BROWN DWARF SPECTRA: DIS-ENTANGLING TEMPERATURE, AGE, METALLICITY, CLOUD SIGNATURES (PI's E. Rice, J. Faherty, K. Cruz, \$354,359)  
UNIVERSITY OF NEW SOUTH WALES (UNSW) VISITING SCIENTIST FELLOWSHIP 2012 (\$8,000)  
NASA ASTROPHYSICS DATA ANALYSIS PROGRAM 2011 (PI E. Rice, Co-PI's J. Faherty, K. Cruz, \$181,647)  
NSF INTERNATIONAL POSTDOCTORAL RESEARCH FELLOWSHIP PROGRAM AWARD, 2010 (\$125,000)  
AAS RODGER DOXSEY DISSERTATION TRAVEL AWARD, 2010 (\$500)  
AAS INTERNATIONAL CONFERENCE TRAVEL AWARD, 2008, 2013 (\$2000 each)  
AMERICAN MUSEUM OF NATURAL HISTORY RESEARCH FELLOWSHIP RECIPIENT, 2008 (\$35,000)  
STONY BROOK PETER B KAHN FELLOWSHIP, 2007 (\$1,500)  
NORTHWESTERN REU FELLOW 1999 (\$8,000)

**Space Based Telescope Time**

James Webb Space Telescope Early Release Science: High Contrast Imaging of Exoplanets and Exoplanetary Systems with JWST (PI S. Hinkley, Collaborator J. Faherty)

Spitzer Trigonometric Parallaxes of the Solar Neighborhood's Coldest Brown Dwarfs, Part 2 (PI Kirkpatrick, Co-I Faherty, Cycle 13-13012, 276 hrs)

The Young and the Restless: Revealing the Turbulent, Cloudy Nature of Young Brown Dwarfs and Exoplanets (PI Faherty, Cycle 10-10138, 318.2 hrs)

Mid-Infrared Variability of Our New Nearby Neighbor (PI Radigan, Co-I Faherty, Cycle 10-10158, 63.5 hrs)

A deep search for Y dwarfs to the WISE limit (PI Pinfield, Co-I Faherty, Cycle 10-10135, 52.8hrs)

Spitzer Trigonometric Parallaxes of the Solar Neighborhood's Coldest Brown Dwarfs (PI Kirkpatrick, Co-I Faherty, Cycle 9-90007K, 141.5 hrs)

Infrared Monitoring of the Nearest Low-Mass T Tauri Binary: TWA 30AB (PI Burgasser, Co-I Faherty, Cycle 9-90236B, 18.8 hrs)

**Postdoctoral Experience** HUBBLE FELLOW, CARNEGIE DTM Sept. 2013 – September 2016  
Washington, DC USA  
Host: Alycia Weinberger

NSF FELLOW, UNIVERSIDAD DE CHILE CERRO CALAN Sept. 2011 – Aug, 2013  
Santiago, Chile  
Host: Maria Teresa Ruiz

**Research Interests** Properties of brown dwarfs and hot extrasolar planets  
Kinematics, Astrometry  
Star and Planet Formation  
Wolf-Rayet Stars, Emission Line Stars, Planetary Nebulae  
Machine Learning  
Scientific Visualization of Large Datasets

**First Author Refereed Publications** Total publications: 68 refereed journal (11 first author)  
Total citations: 2028 (717 for first author publications)  
H-Index: 26

#### 11. POPULATION PROPERTIES OF BROWN DWARF ANALOGS TO EXOPLANETS

**Faherty, Jacqueline K.**; Adric R. Riedel, Kelle L. Cruz, Jonathan Gagne, Joseph C. Filippazzo, Erini Lambrides, Haley Fica, Alycia Weinberger, John R. Thorstensen, C. G. Tinney, Vivienne Baldassare, Emily Lemonier, Emily L. Rice, 2016, ApJs, 225, 10F.

#### 10. INDICATIONS OF WATER CLOUDS IN THE COLDEST KNOWN BROWN DWARF

**Faherty, Jacqueline K.**; Tinney, Chris; Skemer, Andrew; Monson, Andrew, 2014, ApJ, 793L, 16F.

#### 9. CLOUD, TEMPERATURE, AND GRAVITY INDICATIONS IN THE SPECTRA OF THE CLOSEST BROWN DWARF BINARY SYSTEM

**Faherty, Jacqueline K.**; Beletsky, Yuri; Burgasser, Adam; Tinney, Chris; Osip, David; Simcoe, Robert, 2014, ApJ, 790, 90F.

#### 8. CHARACTERIZING WOLF-RAYET STARS IN THE NEAR AND MID INFRARED

**Faherty, Jacqueline K.**; Shara, Michael M.; Zurek, David; Kanarek, Graham; Moffat, Tony, 2014, AJ, 147, 115F.

#### 7. THE HETU'U GLOBAL NETWORK: MEASURING THE DISTANCE TO THE SUN USING THE JUNE 5TH/6TH TRANSIT OF VENUS

**Faherty, Jacqueline K.**; Rodriguez, David R.; Miller, Scott T., 2012, AER, 11a0203F.

6. 2MASSJ035523.51+113337.4: A YOUNG, DUSTY, NEARBY, ISOLATED BROWN DWARF RESEMBLING A GIANT EXOPLANET  
**Faherty, Jacqueline K.**; Rice, Emily L.; Cruz, Kelle L.; Mamajek, Eric E.; Nunez, Alejandro; 2013, AJ, 145, 2F.
5. THE BROWN DWARF KINEMATICS PROJECT (BDKP). III. PARALLAXES FOR 70 ULTRACOOOL DWARFS.  
**Faherty, Jacqueline K.**; Burgasser, Adam J.; Walter, Frederick M.; van der Bliik, Nicole S., Shara, Michael M.; Cruz, Kelle L., West, Andrew A.; Vrba, Frederick J.; Anglada-Escude, Guillem; 2012, ApJ, 752, 56F.
4. IDENTIFICATION OF A WIDE, LOW-MASS MULTIPLE SYSTEM CONTAINING THE BROWN DWARF 2MASS J0850359+105716  
**Faherty, Jacqueline K.**; Burgasser, Adam J.; Bochanski, John J. ; Looper, Dagny L. ; West, Andrew A.; van der Bliik, Nicole S.; 2011, AJ, 141, 71F.
3. 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.; 2010, AJ, 139, 176F.
2. 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.
1. THE TRIGONOMETRIC PARALLAX OF THE NEUTRON STAR GEMINGA  
**Faherty, Jacqueline K.**; Walter, Frederick.; Anderson, Jay.; 2007, Astrophysics and Space Science 308, 225

**First Author**

Near ready for submission

Manuscripts

2. FUNDAMENTAL PROPERTIES OF SUPER JUPITERS IN THE AB DORADUS MOVING GROUP  
**Faherty, Jacqueline K.** & Gagne, J., Planned submission to ApJ in early 2018
1. NEARBY MOVING GROUPS AND CLUSTERS IDENTIFIED IN A GAIA DR-1 CO-MOVING CATALOG  
**Faherty, Jacqueline K.**; Gagne, J., Bochanski, J., Nelson, O., Coker, K., Smithka, I., Desir, D., Vasquez, C., Planned submission to ApJ by end of 2017

**Refereed**

Publications

57. BANYAN. XI. THE BANYAN *Sigma* MULTIVARIATE BAYESIAN ALGORITHM TO IDENTIFY MEMBERS OF YOUNG ASSOCIATIONS WITHIN 150 PC Gagn, Jonathan; Mamajek, Eric E.; Malo, Lison; Riedel, Adric; Rodriguez, David; Lafrenire, David; **Faherty, Jacqueline K.**; Roy-Loubier, Olivier; Pueyo, Laurent; Robin, Annie C.; Doyon, Ren et al., ApJ, accepted January 2018, arXiv180109051G.
56. FUNDAMENTAL PROPERTIES OF CO-MOVING STARS OBSERVED BY *Gaia* Bochanski, J.; **Faherty, J. K.**; Gagne, J. et al. ApJ, accepted January 2018, arXiv180100537B.
55. AN L+T SPECTRAL BINARY WITH POSSIBLE AB DORADUS KINEMATICS Bardalez Gagliuffi, Daniella C.; Gagn, Jonathan; **Faherty, Jacqueline K.**; Burgasser, Adam J., 2018, ApJ, 854..101B.

54. 2MASS J13243553+6358281 IS AN EARLY T-TYPE PLANETARY-MASS OBJECT IN THE AB DORADUS MOVING GROUP Gagn, Jonathan; Allers, Katelyn N.; Theissen, Christopher A.; **Faherty, Jacqueline K.**; Bardalez Gagliuffi, Daniella C.; Artigau, tienne, 2018, ApJ, accepted (January 2018), arXiv180200493G.
53. DISCOVERY OF A POSSIBLE EARLY-T THICK-DISK SUBDWARF FROM THE ALLWISE2 MOTION SURVEY Kellogg, K.; Kirkpatrick, J. D.; Metchev, S.; Gagne, J., **Faherty, J.**, et al. ApJ, 155, 87K.
52. BANYAN. X. DISCOVERY OF A WIDE, LOW-GRAVITY L-TYPE COMPANION TO A FAST-ROTATING M3 DWARF Desrochers, Marie-Eve; Artigau, Etienne; Gagne, Jonathan; Doyon, Ren; Malo, Lison; Faherty, Jacqueline K.; Lafrenire, David., 2017, ApJ, accepted (Novemer 2017), arXiv 1711.11100.
51. PROPER-MOTION AGE DATING OF THE PROGENY OF NOVA SCORPII AD 1437 Shara, M. M.; Ikiewicz, K.; Mikoajewska, J.; Pagnotta, A.; Bode, M. F.; Crause, L. A.; Drozd, K.; **Faherty, J.**; Fuentes-Morales, I.; Grindlay, J. E.; Moffat, A. F. J.; Pretorius, M. L.; Schmidtobreick, L.; Stephenson, F. R.; Tappert, C.; Zurek, D., 2017, Nature, 548, 558S.
50. A SURVEY FOR PLANETARY-MASS BROWN DWARFS IN THE CHAMAELEON I STAR-FORMING REGION Esplin, T. L.; Luhman, K. L.; **Faherty, J. K.**; Mamajek, E. E.; Bochanski, J. J., 2017, AJ, 154, 46E.
49. THE FIRST BROWN DWARF DISCOVERED BY THE BACKYARD WORLDS: PLANET 9 CITIZEN SCIENCE PROJECT Kuchner, Marc J.; **Faherty, Jacqueline K.**; Schneider, Adam C.; Meisner, Aaron M.; Filippazzo, Joseph C.; Gagne, Jonathan; Trouille, Laura; Silverberg, Steven M.; Castro, Rosa; Fletcher, Bob; Mokaev, Khasan; Stajic, Tamara, 2017, ApJ, 841L, 19K.
48. SIMP J013656.5+093347 IS LIKELY A PLANETARY-MASS OBJECT IN THE CARINA-NEAR MOVING GROUP Gagne, Jonathan; **Faherty, Jacqueline K.**; Burgasser, Adam J.; Artigau, tienne; Bouchard, Sandie; Albert, Loc; Lafrenire, David; Doyon, Ren; Bardalez Gagliuffi, Daniella C., 2017, ApJ, 841L, 1G.
47. LACEWING: A NEW MOVING GROUP ANALYSIS CODE Riedel, Adric R.; Blunt, Sarah C.; Lambrides, Erini L.; Rice, Emily L.; Cruz, Kelle L.; **Faherty, Jacqueline K.**, 2017, AJ, 153, 95R.
46. BANYAN. IX. THE INITIAL MASS FUNCTION AND PLANETARY-MASS OBJECT SPACE DENSITY OF THE TW HYA ASSOCIATION Gagne, Jonathan; **Faherty, Jacqueline K.**; Mamajek, Eric E.; Malo, Lison; Doyon, Ren; Filippazzo, Joseph C.; Weinberger, Alycia J.; Donaldson, Jessica K.; Lpine, Sbastien; Lafrenire, David; Artigau, tienne; Burgasser, Adam J.; Looper, Dagny; Boucher, Anne; Beletsky, Yuri; Camnasio, Sara; Brunette, Charles; Arboit, Genevive, 2017, ApJS, 228, 18G.
45. NEW PARALLAXES AND A CONVERGENCE ANALYSIS FOR THE TW HYA ASSOCIATION Donaldson, J. K.; Weinberger, A. J.; Gagne, J.; **Faherty, J. K.**; Boss, A. P.; Keiser, S. A., 2016, ApJ, 833, 95D.
44. BANYAN. VIII. NEW LOW-MASS STARS AND BROWN DWARFS WITH CANDIDATE CIRCUMSTELLAR DISKS Boucher, Anne; Lafrenire, David; Gagne, Jonathan; Malo, Lison; **Faherty, Jacqueline K.**; Doyon, Ren; Chen, Christine H., 2016, ApJ, 833, 95D.
43. MAGAO IMAGING OF LONG-PERIOD OBJECTS (MILO). II. A PUZZLING WHITE DWARF AROUND THE SUN-LIKE STAR HD 11112

Rodigas, Timothy J.; Bergeron, P.; Simon, Amelie; Arriagada, Pamela; **Faherty, Jackie**; Anglada-Escude, Guillem; Mamajek, Eric E.; Weinberger, Alycia; Butler, R. Paul; Males, Jared R.; Morzinski, Katie; Close, Laird M.; Hinz, Philip M.; Bailey, Jeremy; Carter, Brad; Jenkins, James S.; Jones, Hugh; O'Toole, Simon; Tinney, C. G.; Wittenmyer, Rob; Debes, John, 2016, ApJ, 832, 50B.

**42. THE FIRST SPECTRUM OF THE COLDEST BROWN DWARF**

Andrew J. Skemer, Caroline V. Morley, Katelyn N. Allers, Thomas R. Geballe, Mark S. Marley, Jonathan J. Fortney, **Jacqueline K. Faherty**, Gordon L. Bjoraker, Roxana Lupa, 2016, ApJ, 826L, 17S.

**41. A SURVEY FOR HOT CENTRAL STARS OF PLANETARY NEBULAE I. METHODS AND FIRST RESULTS**

Graham C. Kanarek, Michael M. Shara, **Jacqueline K. Faherty**, David Zurek, Anthony F.J. Moffat, 2017, MNRAS, 465, 293K.

**40. THE NEAREST ISOLATED MEMBER OF THE TW HYDRAE ASSOCIATION IS A GIANT PLANET ANALOG**

Kellogg, K.; Metchev, S.; Gagne, J., **Faherty, J.**, 2016, ApJ, 821L, 15K.

**39. THE FIRST BROWN DWARF/PLANETARY-MASS OBJECT IN THE 32 ORIONIS GROUP**

Burgasser, Adam J.; Lopez, Mike A.; Mamajek, Eric E.; Gagne, Jonathan; **Faherty, Jacqueline K.**; Tallis, Melisa; Choban, Caleb; Escala, Ivanna; Aganze, Christian, 2016, ApJ, 820, 32B.

**38. PHOTOMETRIC BROWN-DWARF CLASSIFICATION. II. A HOMOGENEOUS SAMPLE OF 1361 L AND T DWARFS BRIGHTER THAN  $J = 17.5$  WITH ACCURATE SPECTRAL TYPES**

Skrzypek, N., Warren, S., **J., Faherty, J.K.**, 2016, A&A, 589A, 49S.

**37. CHARACTERIZATION OF THE VERY-LOW-MASS SECONDARY IN THE GJ 660.1AB SYSTEM**

Aganze, Christian; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Choban, Caleb; Escala, Ivanna; Lopez, Mike A.; Jin, Yuhui; Tamiya, Tomoki; Tallis, Melisa; Rockward, Willie, 2016, AJ, 151 46A.

**36. SEARCHING FOR BINARY Y DWARFS WITH THE GEMINI MULTI-CONJUGATE ADAPTIVE OPTICS SYSTEM (GEMS)**

Opitz, Daniela; Tinney, C. G.; **Faherty, Jacqueline**; Sweet, Sarah; Gelino, Christopher R.; Kirkpatrick, J. Davy, 2016, ApJ, 819, 17O.

**35. DISCOVERY OF A BROWN DWARF COMPANION TO THE A3V STAR  $\beta$  CIRCINI**

Smith, L. C.; Lucas, P. W.; Contreras Pea, C.; Kurtev, R.; Marocco, F.; Jones, H. R. A.; Beamin, J. C.; Napiwotzki, R.; Borissova, J.; Burningham, B.; **Faherty, J.**; Pinfield, D. J.; Gromadzki, M.; Ivanov, V. D.; Minniti, D.; Stimson, W.; Villanueva, V., 2015, MNRAS, 454 4476S.

**34. MAGAO IMAGING OF LONG-PERIOD OBJECTS (MILO). I. A BENCHMARK M DWARF COMPANION EXCITING A MASSIVE PLANET AROUND THE SUN-LIKE STAR HD 7449**

Rodigas, Timothy J.; Arriagada, Pamela; **Faherty, Jackie**; Anglada-Escude, Guillem; Kaib, Nathan; Butler, R. Paul; Shectman, Stephen; Weinberger, Alycia; Males, Jared R.; Morzinski, Katie M.; Close, Laird M.; Hinz, Philip M.; Crane, Jeffrey D.; Thompson, Ian; Teske, Johanna; Diaz, Matias; Minniti, Dante; Lopez-Morales, Mercedes; Adams, Fred C.; Boss, Alan P., 2016, ApJ, 818, 106R.

**33. AN ALMA SURVEY FOR DISKS ORBITING LOW-MASS STARS IN THE TW HYA ASSOCIATION**

Rodriguez, David R.; van der Plas, Gerrit; Kastner, Joel H.; Schneider, Adam C.; **Faherty, Jacqueline K.**; Mardones, Diego; Mohanty, Subhanjoy; Principe, David, 2015, A&A, 582L 5R.

- 32.** A NEAR-INFRARED SURVEY OF THE INNER GALACTIC PLANE FOR WOLF-RAYET STARS - III. NEW METHODS: FAINTEST WR STARS  
Kanarek, G.; Shara, M.; **Faherty, J.**; Zurek, D.; Moffat, A., 2015, MNRAS, 452, 2858K.
- 31.** FUNDAMENTAL PARAMETERS AND SPECTRAL ENERGY DISTRIBUTIONS OF YOUNG AND FIELD AGE OBJECTS WITH MASSES SPANNING THE STELLAR TO PLANETARY REGIME  
Filippazzo, Joseph C.; Rice, Emily L.; **Faherty, Jacqueline**; Cruz, Kelle L.; Van Gordon, Mollie M.; Looper, Dagny L., 2015, ApJ, 810, 158F.
- 30.** BANYAN. VII. A NEW POPULATION OF YOUNG SUBSTELLAR CANDIDATE MEMBERS OF NEARBY MOVING GROUPS FROM THE BASS SURVEY  
Gagne, Jonathan; **Faherty, Jacqueline K.**; Cruz, Kelle L.; Lafrenire, David; Doyon, Ren; Malo, Lison; Burgasser, Adam J.; Naud, Marie-Eve; Artigau, tienne; Bouchard, Sandie; Gizis, John E.; Albert, Loc, 2015, ApJS, 219, 33G.
- 29.** SDSS J111010.01+011613.1: A NEW PLANETARY-MASS T DWARF MEMBER OF THE AB DORADUS MOVING GROUP; Gagne, Jonathan; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Lafrenire, David; Doyon, Ren; Filippazzo, Joseph C.; Bowsher, Emily; Nicholls, Christine P., 2015, ApJ, 808L, 20G.
- 28.** BANYAN. VI. DISCOVERY OF A COMPANION AT THE BROWN DWARF/PLANET-MASS LIMIT TO A TUCANA-HOROLOGIUM M DWARF; Artigau, tienne; Gagne, Jonathan; **Faherty, Jacqueline**; Malo, Lison; Naud, Marie-Eve; Doyon, Ren; Lafrenire, David; Beletsky, Yuri, 2015, ApJ, 806, 254A.
- 27.** PHOTOMETRIC BROWN-DWARF CLASSIFICATION. I. A METHOD TO IDENTIFY AND ACCURATELY CLASSIFY LARGE SAMPLES OF BROWN DWARFS WITHOUT SPECTROSCOPY  
Skrzypek, N., Warren, S., **J., Faherty, J.K.**, Mortlock, D. J., Burgasser, A.J, Hewett, P.C , 2015,A&A, 574A, 78S.
- 26.** THE LUMINOSITIES OF THE COLDEST BROWN DWARFS  
Tinney, Cris. G.; **Faherty, Jacqueline K.**; Kirkpatrick, J. Davy; Cushing, Michael C.; Morley, Caroline, V.; Wright, Edward L., 2014, ApJ, 796, 39T .
- 25.** WISEP J004701.06+680352.1: AN INTERMEDIATE SURFACE GRAVITY, DUSTY BROWN DWARF IN THE AB DOR MOVING GROUP  
John E. Gizis, Katelyn N. Allers, Michael C. Liu, Hugh C. Harris, **Jacqueline K. Faherty**, Adam J. Burgasser, J. Davy Kirkpatrick, 2015, ApJ,799, 203G.
- 24.** HIGH PROPER MOTION OBJECTS FROM THE UKIDSS GALACTIC PLANE SURVEY  
Leigh Smith,P.W. Lucas, R. Bunce, B. Burningham, H.R.A. Jones, R.L. Smart, N. Skrzypek, D. Rodriguez, **J. Faherty**, A.H. Andrei,S. Catalan, D.J. Pineld, D. Redburn, Anthony F. J., 2014, MNRAS, 14, 1370.
- 23.** THE ALLWISE MOTION SURVEY AND THE QUEST FOR COLD SUBDWARFS  
Kirkpatrick, J. Davy; Schneider, Adam; Fajardo-Acosta, Sergio; Gelino, Christopher R.; Mace, Gregory N.; Wright, Edward L.; Logsdon, Sarah E.; McLean, Ian S.; Cushing, Michael C.; Skrutskie, Michael F.; Eisenhardt, Peter R.; Stern, Daniel; Balokovi, Mislav; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Lansbury, George B.; Rich, J. A.; Skrzypek, Nathalie; Fowler, John W.; Cutri, Roc M.; Masci, Frank J.; Conrow, Tim; Grillmair, Carl J.; McCallon, Howard L.; Beichman, Charles A.; Marsh, Kenneth A., 2014, ApJ, 783, 122K.

- 22.** A NEAR-INFRARED SURVEY OF THE INNER GALACTIC PLANE FOR WOLF-RAYET STARS III. NEW METHODS: FAINTEST WR STARS  
Kanarek, Graham C.; Shara, Michael M.; **Faherty, Jacqueline K.**; Zurek, David; Moffat, Anthony F. J., 2015, MNRAS, 452, 2858K.
- 21.** A MONITORING CAMPAIGN FOR LUHMAN 16AB. I. DETECTION OF RESOLVED NEAR-INFRARED SPECTROSCOPIC VARIABILITY  
Burgasser, Adam J.; Gillon, Michal; **Faherty, Jacqueline K.**; Radigan, Jacqueline; Triaud, Amaury H. M. J.; Plavchan, Peter; Street, Rachel; Jehin, E.; Delrez, L.; Opitom, C., 2014, ApJ, 785, 48B.
- 20.** THE COOLEST ISOLATED BROWN DWARF CANDIDATE MEMBER OF TWA  
Gagne, Jonathan; **Faherty, Jacqueline K.**; Cruz, Kelle; Lafrenire, David; Doyon, Ren; Malo, Lison; Artigau, tienne, 2014, ApJ, 785L, 14G.
- 19.** A DUSTY M5 BINARY IN THE BETA PICTORIS MOVING GROUP  
Rodriguez, David R.; Zuckerman, B.; **Faherty, Jacqueline K.**; Vican, Laura, 2014, A&A 567A, 20R.
- 18.** DISCOVERY OF THE YOUNG L DWARF WISE J1741102.78-464225.5  
Schneider, Adam C.; Cushing, Michael C.; Kirkpatrick, J. Davy; Mace, Gregory N.; Gelino, Christopher R.; **Faherty, Jacqueline K.**; Fajardo-Acosta, Sergio; Sheppard, Scott S., 2013, AJ, 147, 34S.
- 17.** DISCOVERY OF THE Y1 DWARF WISE J064723.23-623235.5  
Kirkpatrick, J. Davy; Cushing, Michael C.; Gelino, Christopher R.; Beichman, Charles A.; Tinney, C. G.; **Faherty, Jacqueline K.**; Schneider, Adam; Mace, Gregory N., 2013, ApJ, 776, 128K.
- 16.** THE KAPPA ANDROMEDAE SYSTEM: NEW CONSTRAINTS ON THE COMPANION MASS, SYSTEM AGE & FURTHER MULTIPLICITY  
Hinkley, Sasha; Pueyo, Laurent; **Faherty, Jacqueline K.**; Oppenheimer, Ben R.; Mamajek, Eric E.; Kraus, Adam L.; Rice, Emily L.; Ireland, Michael J.; David, Trevor; Hillenbrand, Lynne A, et al., ApJ, 779, 153H.
- 15.** THE GALEX NEARBY YOUNG-STAR SURVEY  
Rodriguez, David R.; Zuckerman, B.; Kastner, Joel H.; Bessell, M. S.; **Faherty, Jacqueline K.**; Murphy, Simon J., 2013, ApJ, 774, 101R.
- 14.** NEARBY M, L, AND T DWARFS DISCOVERED BY THE WIDE-FIELD INFRARED SURVEY EXPLORER (WISE)  
Thompson, Maggie A.; Kirkpatrick, J. Davy; Mace, Gregory N.; Cushing, Michael C.; Gelino, Christopher R.; Griffith, Roger L.; Skrutskie, Michael F.; Eisenhardt, Peter R. M.; Wright, Edward L.; Marsh, Kenneth A, Mix, Katholeen J.; Beichman, Charles A.; **Faherty, Jacqueline K.**; Toloza, Odette; Ferrara, Jocelyn; Apodaca, Brian; McLean, Ian S.; Bloom, Joshua S, 2013, PASP, 125, 809T.
- 13.** A WISE SEARCH FOR VERY LATE OBJECTS DETECTED ONLY IN THE W2-BAND  
D. J. Pinfield, J. Gomes, A. C. Day-Jones, T. Cattermole, C. Cardoso, **J. Faherty**, M. T. Ruiz, R. Kurtev, J. R. A. Clarke, B. Burningham, L. Smith, R. Smart, P. W. Lucas, N. Lodieu, M. C. Galvez-Ortiz, J. S. Jenkins, S. Folkes, H. R. A. Jones, R. Rebolo, V. J. S. Bejar, B. Gauza, MNRAS, 437, 1009P.
- 12.** WISE J163940.83-684738.6: A Y DWARF IDENTIFIED BY METHANE IMAGING  
Tinney, Cris. G.; **Faherty, Jacqueline K.**; Kirkpatrick, J. Davy; Wright, Edward L.; Gelino, Christopher R.; Cushing, Michael C.; Griffith, Roger L.; Salter, Graeme, 2012, ApJ, 759, 60T.

11. DEEP SEARCH FOR COMPANIONS TO PROBABLE YOUNG BROWN DWARFS  
G. Chauvin, **J. Faherty**, A. Boccaletti, K. Cruz, A.-M. Lagrange, B. Zuckerman, M. S. Bessell, J.-L. Beuzit, M. Bonnefoy, C. Dumas, P. Lowrance, D. Mouille, and I. Song; 2012, A&A, 548A, 33C.
  
10. DISCOVERY OF TWO VERY WIDE BINARIES WITH ULTRACOOL COMPANIONS AND A NEW BROWN DWARF AT THE L/T TRANSITION  
Koraljka Muzic, Jacqueline Radigan, Ray Jayawardhana, Valentin D. Ivanov, **Jacqueline K. Faherty**, Radostin G. Kurtev, Alejandro Nunez, Henri M. J. Boffin, Olivier Hainaut, Kelle Cruz, David Jones, Stanimir Metchev, Amy Tyndall, Jura Borissova; 2012, AJ, 144, 180M.
  
9. DISCOVERY OF AN UNUSUALLY RED L-TYPE BROWN DWARF  
John E. Gizis, **Jacqueline K. Faherty**, Michael C. Liu, Philip J. Castro, John D. Shaw, Frederick J. Vrba, Hugh C. Harris, Kimberly M. Aller, Niall R. Deacon; 2012, AJ, 144, 94G.
  
8. A NEAR-INFRARED SURVEY OF THE INNER GALACTIC PLANE FOR WOLF-RAYET STARS II. GOING FAINTER: 72 MORE NEW WR STARS  
Shara, Michael M.; **Faherty, Jacqueline K.**; Zurek, David; Moffat, Anthony F. J.; Gerke, Jill; Doyon, Rene; Artigau, Etienne; Drissen, Laurent; 2012, AJ, 143, 149S.
  
7. LOW-MASS TERTIARY COMPANIONS TO SPECTROSCOPIC BINARIES I: COMMON PROPER MOTION SURVEY FOR WIDE COMPANIONS USING 2MASS  
Allen, Peter; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Kirkpatrick, Davy; 2012, AJ, 144, 62A.
  
6. WISEP J180026.60+013453.1: A NEARBY LATE L DWARF NEAR THE GALACTIC PLANE  
Gizis, John E.; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Castro, Philip J.; Shara, Michael M.; 2011, AJ, 142, 171G.
  
5. A WIDELY SEPARATED, HIGHLY OCCLUDED COMPANION TO THE NEARBY LOW-MASS T TAURI STAR TWA 30  
Looper, Dagny L.; Bochanski, John J.; Burgasser, Adam J.; Mohanty, Subhanjoy; Mamajek, Eric E.; **Faherty, Jacqueline K.**, West, Andrew A.; Pitts, Mark A.; 2010, AJ, 140, 1486L.
  
4. THE LOWEST-MASS MEMBER OF THE  $\beta$  PICTORIS MOVING GROUP  
Rice, Emily L.; **Faherty, Jacqueline K.**, Cruz, Kelle L.; 2010, ApJ, 715L, 165R.
  
3. THE ENIGMATIC YOUNG, LOW-MASS 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; 2010, ApJ, 714, 45L.
  
2. 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; 2010, ApJ, 710, 1142B.
  
1. 2MASS J06164006-6407194: 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.



4. BANYAN. XII. NEW YOUNG ASSOCIATION CANDIDATE MEMBERS FROM GAIA DR1 Gagne, J.; Loubier, O.; **Faherty, J. K.** et al., Planned submission to Astron. J. in winter 2017/2018.
3. BANYAN. XIII. FIRST DISCOVERIES FROM THE BASS-ULTRACOOL SURVEY: THE SEARCH FOR PLANETARY-MASS L- AND T-TYPE MEMBERS OF YOUNG ASSOCIATIONS Gagne, J.; **Faherty, J. K.**; Artigau, . et al. Planned submission to Astrophys. J. Supp. in 2018.
1. UNDERSTANDING ATMOSPHERIC FEATURES OF SUBDWARFS AND BROWN DWARFS VIA SDSS J125637.13-022452.4 Gonzales, E., **Faherty, J.**, Gagne, J., Artigau, E., Planned submission to ApJ by the end of 2017.

## White Papers

1. RESULTS FROM THE WIDE-FIELD INFRARED SURVEY EXPLORER (WISE) FUTURE USES SESSION AT THE WISE AT 5 MEETING  
**Faherty, Jacqueline K.**; Alatalo, K.; Anderson, L. D.; Assef, Roberto J.; Bardalez Gagliuffi, Daniella C.; Barry, Megan; Benford, Dominic J.; Bilicki, Maciej; Burningham, Ben; Christian, Damian J.; Cushing, Michael C.; Eisenhardt, Peter R.; Elvisx, Martin; Fajardo-Acosta, S. B.; Finkbeiner, Douglas P.; Fischer, William J.; Forrest, William J.; Fowler, John; Gardner, Jonathan P.; Gelino, Christopher R.; Gorjian, V; Grillmair, Carl J.; Gromadzki, Mariusz; Hall, Kendall P.; Ivezić, Zeljko; Izumi, Natsuko; Kirkpatrick, J. Davy; Kovcs, Andrs; Lang, Dustin; Leisawitz, David; Liu, Fengchuan; Mainzer, A.; Malek, Katarzyna; Marton, Gbor; Masci, Frank J.; McLean, Ian S.; Meisner, Aaron; Nikutta, Robert; Padgett, Deborah L.; Patel, Rahul; Rebull, L. M.; Rich, J. A.; Ringwald, Frederick A.; Rose, Marvin; Schneider, Adam C.; Stassun, Keivan G; Stern, Daniel; Tsai, Chao-Wei; Wang, Feige; Weston, Madalyn E.; L., Edward; Wright; Wu, Jingwen; Yang, Jinyi, 2015, 2015arXiv150501923F (White Paper; Led to funding of CATWISE)
2. THE SCIENCE CASE FOR AN EXTENDED SPITZER MISSION  
Yee, Jennifer C.; Fazio, Giovanni G.; Benjamin, Robert; Kirkpatrick, J. Davy; Malkan, Matt A.; Trilling, David; Carey, Sean; Ciardi, David R.; Apai, Daniel; Ashby, M. L. N.; Ballard, Sarah; Bean, Jacob L.; Beatty, Thomas; Berta-Thompson, Zach; Capak, P.; Charbonneau, David; Chesley, Steven; Cowan, Nicolas B.; Crossfield, Ian; Cushing, Michael C.; de Wit, Julien; Deming, Drake; Dickinson, M.; Dittmann, Jason; Dragomir, Diana; Dressing, Courtney; Emery, Joshua; **Faherty, Jacqueline K.**; Gagne, Jonathan; Gaudi, B. Scott; Gillon, Michael; Grillmair, Carl J.; Harris, Alan; Hora, Joseph; Ingalls, James G.; Kataria, Tiffany; Kreidberg, Laura; Krick, Jessica E.; Lowrance, Patrick J.; Mahoney, William A.; Metchev, Stanimir A.; Mommert, Michael; Migo Mueller, Michael; Shvartzvald, Yossi; Smith, Howard; Stevenson, Kevin B.; Teplitz, H. I.; Willner, S. P., 2017, 2017arXiv1710.04194 (White Paper; Led to an extension of the Spitzer mission)

## Editor

1. GAIA AND THE UNSEEN, THE BROWN DWARF QUESTION. Smart, R., **Faherty, J.**, Barrado, D., Memorie della Societa' Astronomica Italiana (SAIt), 2014.

## Book Chapter in Preparation

1. SPECTRAL PROPERTIES OF BROWN DWARFS AND UNBOUND PLANETARY-MASS OBJECTS **Faherty, J.**, to be published in **Handbook of Exoplanets**, 2018, Springer.

## Conference Proceedings

- 25.** DCT ASTROMETRY OF VERY LOW-MASS STARS Skinner, Julie N.; West, Andrew A.; **Faherty, Jacqueline K.**; Muirhead, Philip S., Cool Stars 19 Proceedings ( 2016csss.confE..36S)
- 24.** THE NEAREST ISOLATED MEMBER OF THE TW HYDRAE ASSOCIATION IS A GIANT PLANET ANALOG Kellogg, Kendra; Metchev, Stanimir; Gagne, Jonathan; **Faherty, Jacqueline**, Cool Stars 19 Proceedings (2016csss.confE..61K)
- 23.** A MOLECULAR DISK SURVEY OF LOW-MASS STARS IN THE TW HYA ASSOCIATION Rodriguez, David R.; van der Plas, Gerrit; Kastner, Joel H.; Schneider, Adam C.; **Faherty, Jacqueline K.**; Mardones, Diego; Mohanty, Subhanjoy; Principe, David, 2015, IAUS, (2016IAUS..314..207R).
- 22.** THE BANYAN ALL-SKY SURVEY FOR BROWN DWARF MEMBERS OF YOUNG MOVING GROUPS Gagne, Jonathan; Lafrenire, David; Doyon, Ren; **Faherty, Jacqueline K.**; Malo, Lison; Cruz, Kelle L.; Artigau, tienne; Burgasser, Adam J.; Naud, Marie-Eve; Bouchard, Sandie; Gizis, John E.; Albert, Loc, 2015, IAUS, (2016IAUS..314...49G).
- 21.** BASS-ULTRACOOL : A SURVEY FOR ISOLATED ANALOGS OF METHANE EXOPLANETS Gagne, Jonathan; **Faherty, Jacqueline K.**; Malo, Lison; Filippazzo, Joseph C.; Burgasser, Adam J.; Artigau, Etienne; Lafrenire, David; Doyon, Rene; Bowsher, Emily; Nicholls, Christine P., 2015 Extreme Solar Systems, (2015ESS.....310419G).
- 20.** RESULTS FROM BASS, THE BANYAN ALL-SKY SURVEY Gagne, Jonathan; Lafreniere, David; Doyon, Rene; **Faherty, Jacqueline**; Malo, Lison, 2014, Cool Stars 18 Proceedings, (2015csss...18..975G).
- 19.** NEW RESULTS FROM THE GALEX NEARBY YOUNG-STAR SURVEY Rodriguez, David R.; Zuckerman, B.; Kastner, Joel H.; Vican, Laura; Principe, David; **Faherty, Jacqueline K.**; Murphy, Simon J.; Bessell, Mike S., Cool Stars 18 Proceedings, (2015csss...18..249R)
- 18.** NEW GALACTIC WOLF-RAYET STARS Kanarek, G.; Shara, M.; **Faherty, J.**; Zurek, D.; Moffat, A. F. J., 2015 Workshop on Wolf-Rayet Stars, (2015wrs..conf..359K).
- 17.** AGES OF BROWN DWARFS **Jacqueline K. Faherty**, 2014, Gaia and the Unseen: The Brown Dwarf Question, Memorie della Societa' Astronomica Italiana (SAIt) 2014.
- 16.** YOUNG BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY **Jacqueline K. Faherty**, Kelle L. Cruz, Emily L. Rice, Adric Riedel, 2013, Latin America Regional IAU Meeting (LARIM), 2014RMxAC, 44, 53R.
- 15.** THE GALEX NEARBY YOUNG-STAR SURVEY Rodriguez, D. R.; Zuckerman, B.; Kastner, J. H.; Bessell, M. S.; **Faherty, J. K.**; Murphy, S. J.; Vican, L., 2013, Latin America Regional IAU Meeting (LARIM), 2014RMxAC..44...53R.
- 14.** YOUNG BROWN DWARFS AS GIANT EXOPLANET ANALOGS **Jacqueline K. Faherty**, Kelle L. Cruz, Emily L. Rice, Adric Riedel, 2013, Fuerteventura Brown Dwarfs Come of Age, Submitted, (arXiv: 1307.1127G)
- 13.** BAYESIAN ANALYSIS TO IDENTIFY VERY LOW-MASS MEMBERS OF NEARBY YOUNG STELLAR KINEMATIC GROUPS Gagne, Jonathan; Lafreniere, David; Doyon, Rene; Malo, Lison; **Faherty, Jacqueline**; Artigau, Etienne, 2013, Fuerteventura Brown Dwarfs Come of Age, Submitted, (arXiv: 1307.1127G)

**12. LUHMAN 16AB: A REMARKABLE, VARIABLE L/T TRANSITION BINARY 2 PC FROM THE SUN**  
Burgasser, A. J.; **Faherty, J.**; Beletsky, Y.; Plavchan, P.; Gillon, M.; Radigan, J.; Jehin, E.; Delrez, L.; Opitom, C.; Morrell, N, et al., 2013, Fuerteventura Brown Dwarfs Come of Age, Submitted, (arXiv: 1307.6916B)

**11. YOUNG BROWN DWARFS AT LOW SPECTRAL RESOLUTION**

Rice, Emily; Filippazzo, Joe; **Faherty, Jacqueline**; Cruz, Kelle, 2013, Protostars and Planets VI, (2013prpl.conf2K070R)

**10. THE GALEX NEARBY YOUNG-STAR SURVEY**

Rodriguez, David; Zuckerman, Ben; Kastner, Joel; Bessell, Mike; **Faherty, Jacqueline**; Murphy, Simon; Vican, Laura, 2013, Protostars and Planets VI, (2013prpl.conf2K096R)

**9. LESSONS FROM BROWN DWARF SCIENCE: RECOGNIZING SIGNATURES OF YOUTH AND LOW GRAVITY IN THE NEAR INFRARED SPECTRA**

Cruz, Kelle; **Faherty, Jacqueline**; Rice, Emily; Riedel, Adric; Nunez, Alejandro, 2013, Protostars and Planets VI, (2013prpl.conf2G022C)

**8. YOUNG BROWN DWARFS AS GIANT EXOPLANET ANALOGS**

**Faherty, Jacqueline, K.**; Cruz, Kelle; Rice, Emily; Riedel, Adric, 2013, Protostars and Planets VI, (2013prpl.conf2G024F)

**7. THE KINEMATICS OF VERY LOW MASS DWARFS: SPLINTER SESSION SUMMARY**

Burgasser, Adam J., **Faherty, Jacqueline K.**, Schmidt, Sarah, West, Andrew A., Zapatero Osorio, Maria Rosa, Pineda, J. Sebastian, Burningham, Ben, Nicholls, Christine, Sanderson, Robyn, Shkolnik, Evgenya, Rodriguez, David, Riedel, Adric, and Joergens, Viki. 2012, Proceedings on the 17th Cambridge Workshop on Cool Stars, Submitted.

**6. JUVENILE ULTRACOOL DWARFS**

Rice, Emily L., **Faherty, Jacqueline K.**, Cruz, Kelle, Barman, Travis,Looper, Dagny, Malo, Lison, Mamajek, Eric, Metchev, Stanimir, Shkolnik, Evgenya. 2010, Proceedings on the 16th Cambridge Workshop on Cool Stars, 448, 481R.

**5. THE BROWN DWARF KINEMATICS PROJECT III. PRELIMINARY PARALLAX RESULTS**

**Faherty, Jacqueline K.**, Burgasser, Adam., Walter, Frederick., van der Bliet, Nicole S., & Shara, Michael., Cruz, Kelle L. 2010, Proceedings on the 16th Cambridge Workshop on Cool Stars, Proceedings on the 16th Cambridge Workshop on Cool Stars, 448, 1343F.

**4. 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, Proceedings on the 15th Cambridge Workshop on Cool Stars, 1094, 517.

**3. 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.

**2. 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.

## 1. 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, 102-103

**Teaching  
and  
Outreach**

PROFESSOR, AMERICAN MUSEUM OF NATURAL HISTORY (AMNH) Winter 2015- Present  
Instructor for the graduate level Masters in Teaching (MAT) Space Systems Course

ADJUNCT, CITY UNIVERSITY OF NEW YORK (CUNY) Spring 2008- Present  
Instructor for School of Professional Studies Space Time and Motion Course

INSTRUCTOR, HAYDEN PLANETARIUM Fall 2010 - Spring 2011  
Instructor for the NASA High School After School Program

LECTURER, HAYDEN PLANETARIUM Summer 2004 - Present  
Presenter for Virtual Universe and Celestial Highlights monthly Planetarium programs

HAYDEN ASTROPHYSICS OUTREACH COORDINATOR, AMERICAN MUSEUM OF NATURAL HISTORY Spring 2003 - Fall 2004  
Created the Hayden Planetarium's Outreach program for middle-high school students.

ASTRONOMY MOVEABLE MUSEUM COORDINATOR, AMERICAN MUSEUM OF NATURAL HISTORY Winter 2002 - Spring 2003  
Created teaching materials then instructed with the moveable at various schools in NYC

INSTRUCTOR, AMERICAN MUSEUM OF NATURAL HISTORY Fall 2002 - Spring 2011  
Presenter with the Eugene Lang Middle School Outreach program

TEACHING ASSISTANT, STONY BROOK UNIVERSITY Fall 2004, Spring 2005  
Led practical portion of Observational Astronomy for majors.

INSTRUCTOR, AMATEUR ASTRONOMERS OF NEW YORK Fall, Winter, Spring, 2002, 2003  
Instructor for Introduction to Astronomy and Cosmology courses

PROFESSIONAL DEVELOPMENT INSTRUCTOR, AMERICAN MUSEUM OF NATURAL HISTORY Spring 2002 - Fall 2004  
Designed workshops for teachers from NYC schools on how to use AMNH as an Astronomy resource.

**Selected Media  
Appearances**

New York Times: Contributing Scientist on numerous stories

NPR All Things Considered, 2016 Planet Line-up.

NPR All Things Considered, 2016 Trifecta of Celestial Activity.

NPR All Things Considered, 2015 Supermoon.

NPR Weekend Edition, 2014 Geminids meteor shower.

NPR Weekend Edition, 2014 Manhattanhenge.

Contributing Scientist "Worlds Weirdest Weather": Weather Channel, 8 episodes.

Fox 5 Morning Show, Multiple Appearances

Inside Edition, Multiple Appearances

The Women of Marvel Podcast

CUNY Science & U TV Multiple Appearances

Wall Street Journal, WPIX11, Village Voice, NY 1 TV, Accuweather.com, NY Post, ZDF German TV for various Manhattanhenge events

WNYC Radio, NHK Japan TV interviews for July 11, 2012 Manhattanhenge event

La Tercera, 24 horas, El Mercurio, RadioChile interviews for June 5th Transit of Venus event on

Easter Island  
 NPR Science Friday Radio, Televisa Mexico TV interviews for July 12th, 2011 Manhattanhenge event  
 American Museum of Natural History Blog contributor

**Selected  
 Public  
 Talks**

KEYNOTE SPEAKER AT COLUMBIA UNIVERSITY'S CRACKING THE CODE: TEACHING STEM FOR CITIZENSHIP IN THE 21ST CENTURY  
 SUMMER OF STARS AT THE HAYDEN PLANETARIUM, 2015  
 GOING ROGUE: PLANETS WITHOUT PARENT STARS IN THE GALAXY  
 Benjamin Dean Lecturer at the Morrison Planetarium, 2014  
 STARS, CONSTELLATIONS, AND LEGENDS IN THE SOUTHERN SKY  
 Virtual Universe and Celestial Highlights Talks at AMNH (6-10 each year)  
 EL FUTURO DE LOS VIAJES EN ESPACIO  
 Easter Island Museum, 2012  
 THE GOOD, THE BAD, AND THE UGLY: ASTRONOMY IN THE MEDIA  
 Columbia University Open Night, 2009  
 PLANETS, PLANETS EVERYWHERE!  
 Amateur Astronomers of New Jersey, 2009  
 ROBOTS ON MARS: THE STORY OF SPIRIT AND OPPORTUNITY  
 New School, 2006  
**SELECTED AMNH Astronomy LIVE Talks (monthly series in the Hayden):**  
 THE GRAND TOUR OF THE UNIVERSE  
 STRANGE NEW WORLDS  
 THINGS THAT GO BANG IN THE UNIVERSE  
 ASTRONOMICAL PHENOMENAL REVEALED  
 EXPERIENCE MANHATTANHENG  
 ASTRONOMY LIVE: SKY TO SPACE  
 MANHATTANHENG REVEALED!  
 INSIGHTS FROM THE HUBBLE TELESCOPE  
 THE EXPLOSIVE UNIVERSE  
 OUR SOLAR NEIGHBORHOOD  
 WHATS UP IN THE WINTER SKY?  
**SELECTED Astronomy on Tap Talks (monthly neighborhood bar talks):**  
 MANHATTANHENG EXPLAINED  
 THE JAMES WEBB SPACE TELESCOPE  
 DEBUNKING COSMOS  
 HUBBLE'S WORLD

**Diversity  
 Efforts**

RAISING AWARENESS IN SCIENCE EDUCATION FOR WOMEN (RAISE-W) Current  
 Along with Dr Mande Holford, a professor of chemistry at Hunter college, we have started a 501-c non-profit corporation entitled RAISE-W. Current efforts match young women with executive style coach mentors to foster a strong, supportive academic environment and study/encourage the retention of females on science career tracks.

ORGANIZER, EASTER ISLAND TRANSIT VIEWING Summer 2012  
 Organized a 2-day Astronomy outreach workshop at the Easter Island Museum and a visit by 9 professional astronomers to the 3 main schools on the island to promote the June 5th Transit of Venus. 20% of the island was present for the viewing I organized at the Ahu Tahai Moai alter site.

ORGANIZER, GLOBAL HETU'U VENUS TRANSIT VIEWING NETWORK Summer 2012  
 Organized a global network of school groups in Chile, China, Australia, Europe, Japan, Iran, USA, India and Colombia to view the June 5th/6th transit of venus and combine timing measurements to compute the distance to the Sun.

PANELIST, AMNH AWIS CHAPTER Winter 2011  
Served on a lunch panel with 4 senior female faculty members to discuss issues related to gender that arise while doing field work

MENTOR, HAYDEN PLANETARIUM Fall 2010 - Present  
Mentor for three high school female students in the NASA Science and Research Mentoring Program (SRMP)

NATIONAL SOCIETY OF BLACK PHYSICISTS Winter 2009, 2010  
Attended annual meeting to give scientific talk and forge mentorships.

PRESENTER, TRENDSETTERS NETWORK CONFERENCE Fall 2002  
Speaker at an all girls event where female professionals look to mentor young women in Science

MENTOR, INTERMEDIATE SCHOOL 162 Fall 2003-Spring 2004  
Arranged Astronomy activities for the after-school programs at IS162 in the Bronx

PRESENTER, KIDS CORP DAY CAMP Summer 2002  
Provided Astronomy activities for students based in from NYC by aid societies to rural NJ

PRESENTER, WIZARDS OUTREACH PROGRAM Fall 2001  
Mentored middle school females in Science through the WIZARDS outreach program

### Observing Experience

VLT: UT1, UT2, UT3, ISAAC, X-shooter, FORS2 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, LDSS-3, FIRE Spectrographs; PANIC near-IR imager  
Dupont: CAPSCAM Optical imager  
MDM: 1.3m, 2.4m with optical imager NELLIE, near-IR imager and spectrograph TIFKAM  
IRTF: 3.5m with SpeX near-IR spectrograph  
KECK: NIRSPEC  
La Silla: NTT with SofI

### Selected Scientific Talks

SCIENCE VISUALIZATION FROM AN EDUCATION PERSPECTIVE  
Moderator for a 4 person panel, NYC. Invited, 2017

OBSERVED PROPERTIES OF SUPER JUPITERS  
The Brown Dwarf to Exoplanet Connection Conference 2, Delaware. Contributed Talk, 2017

POPULATION PROPERTIES OF EXOPLANET ANALOGS  
Exoplanets in the era of Giant telescopes (GMT meeting), California. Contributed Talk, 2016

BROWN DWARFS AND EXOPLANETS  
SACNAS meeting, California. Invited Talk, 2016

THE COLDEST BROWN DWARFS  
Magellan Science Meeting, Washington, DC. Contributed Talk, 2016

FUNDAMENTAL PROPERTIES OF BROWN DWARF EXOPLANET ANALOGS  
Cool Stars Meeting, Sweden. Invited Talk, 2016

LIFE AROUND BROWN DWARFS?  
Carnegie Origins meeting, Washington, DC, 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS  
Harvard CFA Colloquium, Boston, MA 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS  
Leiden University, Leiden, Netherlands, 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS  
Vassar College, Poughkeepsie, NY, 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS  
Bucknell Colloquium, Lewisburg, PA, 2015.

EXTREME PLANET-LIKE SYSTEMS: BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY  
Extreme Solar Systems III, Hilo Hawaii, 2015.

THE FUNDAMENTAL PROPERTIES OF GIANT EXOPLANET ANALOGS  
In the Spirit of Lyot: Direct Detection of Exoplanets and Circumstellar Disks, Montreal, Quebec,  
2015.

FUNDAMENTAL PROPERTIES OF AN AGE CALIBRATED SAMPLE OF BROWN DWARFS  
IAUS 314: Young Stars and Planets Near the Sun, Atlanta, GA, 2015.

THE BROWN DWARF TO EXOPLANET CONNECTION  
The Brown Dwarf to Exoplanet Connection Conference: From Atmospheres to Formation. Review  
and Workshop, University of Delaware, 2014.

AGES OF BROWN DWARFS  
Gaia and the Unseen: The Brown Dwarf Question. Turin, Italy. Invited Review.

YOUNG BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY  
Cool Stars 18: Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, Flagstaff 2014

YOUNG BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY  
Universidad de Catolica Santiago, Chile, 11/2013, University of Delaware, USA, 3/2014, Carnegie  
Institution of Science, DTM, USA, 04/2014, Carnegie Institution of Science, Pasadena, USA 03/2014  
Universite de Montreal, Canada, 02/2014 Stony Brook University, USA, 02/2014, Harvard, CFA,  
USA, 05/2014

TO BE OR NOT TO BE (A PLANET): ISOLATED BROWN DWARFS AT THE EXOPLANET MASS  
BOUNDARY  
Latin America Regional IAU Meeting (LARIM), Brazil 2013

THE KINEMATICS OF YOUNG BROWN DWARFS  
Exoplanets and Brown Dwarfs: Mind the Gap, Hatfield, UK 2013

YOUNG BROWN DWARFS AS GIANT EXOPLANET ANALOGS  
Brown Dwarfs Come of Age, Fuerteventura, Spain, 2013

ADVANCEMENTS IN ASTROMETRY: FROM BROWN DWARFS TO GIANT EXOPLANETS  
University of New South Wales, Australia 2012

CHARACTERIZING GIANT EXOPLANET ANALOGS  
2nd Australian Exoplanet Workshop, Canberra, Australia, 2012

ADVANCEMENTS IN ASTROMETRY: FROM BROWN DWARFS TO GIANT EXOPLANETS  
University of Hertfordshire, Hatfield UK, 2012, Review talk at Cool Stars 17 Ultracool Dwarf Kine-  
matics Splinter Session Barcelona, Spain, 2012

THE BROWN DWARF KINEMATICS PROJECT  
Universidad de Chile, Cerro Calan Santiago, Chile 2011, Universidad Catolica Santiago, Chile 2011,  
European Southern Observatory Santiago, Chile 2011

THE BROWN DWARF KINEMATICS PROJECT: HOW DISTANCES BOTH ADVANCE AND COMPLICATE OUR UNDERSTANDING OF THE BROWN DWARF POPULATION

AAS 2011 Roger Doxsey Thesis Prize Presentation, Lehman College Astronomy 2011 Seminar, Penn State Astronomy Seminar 2011, Delaware Astronomy Seminar 2011, ASNY Graduate Thesis Prize Invited Talk 2011

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

**Professional Memberships or Services**

AAS Education Board

Scientific Organizing Committee: WISE at 5: Legacy and Prospects

Scientific Organizing Committee: The Brown Dwarf to Exoplanet Connection Conference I and II

Editor, conference proceedings, Gaia and the Unseen: The Brown Dwarf Question

Scientific Organizing Committee: Gaia and the Unseen: The Brown Dwarf Question

Scientific Organizing Committee: Exoplanets and Brown Dwarfs: Mind the Gap

Referee: ApJ, AJ, MNRAS, Science

American Astronomical Society

AAS Committee on the Status of Minorities in Astronomy (CSMA) term member

National Society of Black Physicists

American Association of University Women

Association for Women in Science

Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

Time allocation Committee: HST, Spitzer, Gemini

**Active BDNYC Group Members Mentored**

Eileen Gonzales (3rd year PhD student CUNY)

Elianna Schwab (Helen Fellow, AMNH Bridge UP program)

Daniella Bardalez Gagliuffi (AMNH Postdoctoral Fellow)

Rocio Kiman (2nd year PhD student CUNY)

Mark Popinchalk (1st year PhD student CUNY)

Victoria DiTomasso (4th year undergraduate, CUNY)

Jean-Paul Ventura (4th year undergraduate, CUNY)

Evan Morris (4th year undergraduate, Columbia)

Haley Fica (1st year Masters student, Columbia)

Paige Giorla (Director Slooh Observatory)

Aurora Cid (3rd year undergraduate, CUNY)

Coleen Cleary (4th year undergraduate, CUNY)

**Past Students Mentored**

Joseph Filippazzo (former CUNY graduate student, currently STSCI staff)

David Rodriguez (former AMNH postdoc, currently STSCI staff)

Adric Riedel (former AMNH postdoc, currently STSCI staff)



Munazza Alam (former CUNY undergrad, current graduate student Harvard)

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