

Mark A. Pitts

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- Education**
- Ph.D. Astronomy**, April 2011 (expected)
Institute for Astronomy, University of Hawaii at Manoa, Honolulu, HI
Thesis: *Low-Mass Objects in Nearby Clusters: Mass Functions & Spatial Distributions*
Advisor: Dr. Eugene A. Magnier
- M.S. Astronomy**, 2005
Institute for Astronomy, University of Hawaii at Manoa, Honolulu, HI
- B.S. Physics & Astronomy**, 2003
The Ohio State University, Columbus, OH
With Honors & Distinction in Astronomy

- Certification**
- Teaching Innovative Laboratory Experiences**, 2010
Institute for Scientist & Engineer Educators, University of California, Santa Cruz, CA

- Observing Expertise**
- SpeX/IRTF (Near-Infrared Spectroscopy)
- Professional Memberships**
- Junior Member, American Astronomical Society

- Research**
- Graduate Research Assistant**, *Institute for Astronomy, University of Hawaii at Manoa, 2006-Present*
Advisor: Dr. Eugene A. Magnier
- Identifying Low-Mass Objects in Nearby Clusters
- Graduate Research Assistant**, *Institute for Astronomy, University of Hawaii at Manoa, 2006-2007*
Advisor: Dr. Eugene A. Magnier
- Creating Synthetic Photometry for the Pan-STARRS 3-Pi Survey
- Graduate Research Assistant**, *Institute for Astronomy, University of Hawaii at Manoa, 2004-2006*
Advisor: Dr. Karen J. Meech
- The Rotation and Distant Activity of the Comet C/1997 BA6 Spacewatch
- Graduate Research Assistant**, *Institute for Astronomy, University of Hawaii at Manoa, 2003-2005*
Advisor: Dr. Michael Liu
- Near-Infrared Spectroscopic Identification of Young Brown Dwarfs
- Undergraduate Honors Thesis**, *The Ohio State University, 2000-2003*
Advisor: Dr. Kris Sellgren
- Molecular Hydrogen Extinction in the Reflection Nebula NGC 7023
- Research Experience for Undergraduates (REU) Participant**, *Indiana University, Summer 2002*
Advisor: Dr. R. Kent Honeycutt
- Analysis of Superhumps in the Lightcurve of v1159 Orionis

Undergraduate Research Assistant, *The Ohio State University, Winter 2000 - Spring 2001*

Advisor: Dr. Linn D. Van Woerkom

- Laser Lab Assistant

REU Participant, *Institute for Astronomy, University of Hawaii at Manoa, Summer 2001*

Advisor: Dr. Robert D. Joseph

- Near-infrared spectroscopy of a Sample of Luminous Infrared Galaxies

Undergraduate Research Assistant, *Goddard Spaceflight Center, Summer 2000*

Advisor: Dr. Robert C. Bruhweiler

- Computer Modeling of Galactic Evolution Based on Density and Supernova Rate

Summer Internship, *Goddard Spaceflight Center, 1999*

Advisor: Dr. D. Michael Crenshaw

- Study of Intrinsic Absorption Lines in Active Galactic Nuclei using archived HST spectra

Teaching

Instructor, *Institute for Scientist & Engineer Educators, 2010*

Advisor: Lisa Hunter

- NSO/AKAMAI Remote Sensing Workshop (Co-designed a photometry lab)

Instructor, *Institute for Scientist & Engineer Educators, 2008-2009*

Advisor: Lisa Hunter

- Teaching Inquiry Activities to Prepare Undergraduates for Summer Internships in Science and Engineering

Professional Development Program Participant, *Institute for Scientist & Engineer Educators, 2007-Present*

Advisor: Lisa Hunter

- Designing Undergraduate Lab Activities Using Inquiry

Teaching Assistant, *University of Hawaii at Manoa, 2007*

Advisor: Dr. Gerald Luppino & Dr. Istvan Szapudi

- Assistant Teaching for 100-Level Astronomy Lecture Courses

Instructor, *University of Hawaii at Manoa, Summer 2007*

- Solo Teaching for Summer Session 100-Level Astronomy Lecture Course

Teaching Assistant, *University of Hawaii at Manoa, 2003-2004*

Advisor: Dr. Richard J. Wainscoat, Dr. Robert A. McLaren, & Dr. Alan N. Stockton

- Assistant Teaching for 100-Level Astronomy Lecture and Lab Courses

Public Outreach

Starlab Planetarium Presenter/Coordinator, *Institute for Astronomy, 2005-Present*

- 6-10 Starlab planetarium shows per year at schools, libraries, and public events across Hawaii

Public Stargazing Presenter, *Institute for Astronomy, 2005-Present*

- 1-2 Public stargazing events per year

Annual Public Talk, *Institute for Astronomy, 2006-2008*

- Annual Invited Talk at Habilitat Addiction Treatment Center

Computer Skills

Languages: Pascal, IDL, C++

Typesetting: L^AT_EX, HTML

Refereed Research Papers

Looper, D. L., Bochanski, J. J., Burgasser, A. J., Mohanty, S., Mamajek, E. E., Faherty, J. K., West, A. A., & **Pitts, M. A.** 2010 *A Widely-Separated, Highly-Occulted Companion to the Nearby Low-Mass T Tauri Star TWA 30*, *The Astronomical Journal (AJ)*, 140, 1486

Looper, D. L., Mohanty, S., Bochanski, J. J., Burgasser, A. J., Mamajek, E. E., Herczeg, G. J., West, A. A., Faherty, J. K., Rayner, J., **Pitts, M. A.**, & Kirkpatrick, J. D. 2009 *The Enigmatic Young Low-Mass Variable TWA 30*, *The Astrophysical Journal (ApJ)*, 714, 45L

Meech, K. J., Pittichova, J., Bar-Nun, A., Notesco, G., Laufer, D., Hainaut, O. R., Lowry, S. C., Yeomans, D. K., & **Pitts, M.** 2009 *Activity of Comets at Large Heliocentric Distances Pre-Perihelion*, (*Icarus*), 201, 719

**Education
Publications**

Harrington, D. M., Ammons, M., Hunter, L., Max, C., Hoffmann, M., **Pitts, M.**, & Armstrong, J. D. 2010 *Teaching Optics and Systems Engineering With Adaptive Optics Workbenches*, Astronomy Society of the Pacific (ASP) Conference Proceedings, in-press (<http://adsabs.harvard.edu/abs/2010arXiv1009.4463H>)

Montgomery, R., Harrington, D., Sonnett, S., **Pitts, M.**, Mostafanezhad, I., Foley, M., Laag, E., & Hunter, L. 2010 *The Design and Implementation of the Akamai Maui Short Course*, ASP Conference Proceedings, in-press (<http://adsabs.harvard.edu/abs/2010arXiv1009.4458M>)

Other Papers

Pitts, M. & Magnier, E. 2007 *Pan-STARRS Synthetic Photometry Catalog PS1 3π Survey Source Count Predictions*, PSDC-400-006-00

**AAS Poster
Presentations**

Pitts, M. A. & Magnier, E. A. 2010 *A Proper-Motion Search for New Low-Mass Members of Nearby Clusters*, Bulletin of the American Astronomical Society (BAAS), 41, 334

Pitts, M. A. & Magnier, E. A. 2007 *The Image Processing Pipeline: Automated and Streamlined Data Reduction, Photometry, and Astrometry for the Pan-STARRS System*, BAAS, 39, 806

Pitts, M. A., Robertson, J. W., & Honeycutt, R. K. 2002 *Systematics of Superhumps in the Short Supercycle SU UMa Dwarf Nova V1159 Ori*, BAAS, 34, 1163

Joseph, R. D. & **Pitts, M.** 2001 *Near-Infrared Spectroscopy of a Sample of Luminous Infrared Galaxies*, BAAS, 33, 1381

Goyette, J., Bruhweiler, F. C., **Pitts, M.**, & Gabel, J. 2001 *The History of the Local ISM: The Last 50 Million Years*, BAAS, 33, 884

References

Dr. Eugene A. Magnier

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Lisa Hunter

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University of California Santa Cruz
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Santa Cruz, CA 95064, USA
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Mary Kadooka

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