

Mark A. Pitts

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Education

Ph.D. Astronomy, Spring 2010 (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, December 2005

Institute for Astronomy, University of Hawaii at Manoa, Honolulu, HI

B.S. Physics & Astronomy, May 2003

The Ohio State University, Columbus, OH

With Honors & Distinction in Astronomy

Certification

Higher Education Science & Engineering Teaching, Winter 2009 (expected)

Institute for Scientist & Engineer Educators, University of California, Santa Cruz, CA

Honors and Awards

- Recipient, Traditional & Undergraduate Research Scholarships
- Recipient, Mayers Mathematical & Physical Sciences Scholarship
- Recipient, Astronomy Dept. Slusher Scholarship
- Recipient, Physics Dept. Smith Junior Award

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, 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-Present*

- Annual Invited Talk at Habilitat Addiction Treatment Center

Computer Skills

Languages: Pascal, IDL, C++

Typesetting: L^AT_EX, HTML

Refereed Papers

Pitts, M. A., Magnier, E. A., & Liu, M. 2009 *A Proper-Motion Search for Low-Mass Members of Taurus*, in-prep

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

Other Papers

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

Posters

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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Honolulu, HI 96822, USA
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Lisa Hunter

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Room 213, Center for Adaptive Optics Building
University of California Santa Cruz
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Mary Kadooka

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University of Hawaii at Manoa
2680 Woodlawn Dr
Honolulu, HI 96822, USA
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kadooka@ifa.hawaii.edu

Other Interests

Screenwriter

Published Short Films: *Mitsabi's Dream*, <http://www.youtube.com/watch?v=Ri1cvnozFLg>

Creative Writing

Published Books: *Angels 2200: The Risae Campaign*, in-prep

Video & Board Games

Choral Singing