Jason Melbourne

Graduate Student

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Degrees

- 2006 Ph.D. Astronomy, University of California Santa Cruz (May 2006) Thesis: The Optical and Infrared Evolution of Blue Galaxies to z=1. (D. C. Koo, advisor)
- 2001 M.A. Astronomy, Wesleyan University Thesis: *Metal Abundances in KISS Galaxies* (J. J. Salzer, advisor)
- 1995 B.A. Physics and Astronomy (double major), University of California Berkeley

Schools and Workshops

- 2005 The Center for Adaptive Optics Professional Development Workshop
- 2004 The Jerusalem Winter School: The Origin of Galaxies
- 2001 The Vatican Observatory Summer School: Compact Objects

Research Experience

(See Research Summary and Publication List for Details)

- 2001 2005 Graduate Student Researcher, University of California Santa Cruz Emphasis on extragalactic observational astronomy across multi-wavelength including UV (STIS), optical (ACS), near IR (Lick and Keck Adaptive Optics), mid IR (Spitzer MIPS), and radio (Aricebo). Completed four first author papers (see Publications List), advisors: D. C. Koo, C. Max, S. Faber.
- 1999 2001 Graduate Student Researcher, Wesleyan University Emphasis on spectroscopy of low-z emission line galaxies. Completed two first author papers (see Publications List), advisors: J. J. Salzer, A. Sarajedini.
- 1995 1996 Assistant Researcher, Lawrence Berkeley National Laboratory The Supernova Cosmology Project, emphasis on optical photometry, advisor: Saul Perlmutter.
- 1992 1995 Undergraduate Researcher, University of California Berkeley Narrow-band photometry of comets, advisor: H. Spinrad.

Successful Proposals

(In which J. Melbourne was primary contributer)

2005 Co-Investigator. Keck Laser Guide Star Adaptive Optics Imaging of Large Disk Galaxies in GOODS-S

- 2005 Co-Investigator. Keck Laser Guide Star Adaptive Optics Imaging of Chandra X-ray Sources in GOODS-S
- 2004 Co-Investigator. Keck Natural Guide Star Adaptive Optics Imaging of Galaxies in GEMS and COSMOS
- 2003 Principle-Investigator. Lick Laser Guide Star Adaptive Optics Imaging of Local Blue Compact Galaxies

Recent Talks

- 2005 A Practical Guide to Adaptive Optics Observing on Keck. The Center for Adaptive Optics Extragalacitic AO Workshop, UC Sanata Cruz, August 2005
- 2005 Keck Laser Illuminates AGN in the Distant Universe. American Astronomical Society Meeting 205, January 2005
- 2004 Laser Illuminates Compact Galaxies. Starbursts: From 30 Doradus to Lyman Break Galaxies, Cambridge, United Kingdom, September 2004

Teaching Experience

- 2005 Lead Instructor Center for Adaptive Optics Mainland Short Course for Undergraduates
- 2003 Project Advisor COSMOS, an Astronomy Summer Program for High School Students
- 1999 2002 Teaching Assistant Undergraduate Astronomy Classes
- 1998 1999 Astronomy Teacher Project Astro, Astronomy for Elementary School Classes

Students Advised

- 2005 Emily De La Garza, Center for Adaptive Optics Undergraduate summer intern Stellar Population Synthesis Models of Synthetic Galaxies. Emily won best poster for her research at the Society for Advancement of Chicanos/Latinos and Native Americans (SACNAS) annual science meeting, September 2005.
- 2004 Conswella White, Center for Adaptive Optics Undergraduate summer intern Decomposing Adaptive Optics Images of Disk Galaxies.

Professional Service

- 2005 Organized and Chaired the The Center for Adaptive Optics Extragalactic AO Workshop, University of California Santa Cruz, August 2005
- 2004 The Graduate Student Representative to the UCO/Lick Observatory Job Search Committee
- 2003 2004 UC Santa Cruz Astronomy Department, Graduate Student Spokesperson