Jason Melbourne

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Education

University of California Santa Cruz (Ph.D.)
Santa Cruz, California
Subject: Astronomy and Astrophysics (2006)

Wesleyan University (Masters)
Middletown, Connecticut
Subject: Astronomy (2001)

University of California Berkeley (Bachelors)
Berkeley, California
Subject: Physics and Astronomy double major (1995)

Research Experience

Graduate Student Researcher

University of California Santa Cruz, Santa Cruz California (2001 –2006)

Engaged in self-directed research to quantify the evolution of blue galaxies in multi-wavelength imaging studies. Facilitated the success of the Center for Adaptive Optics Treasury Survey. This involved writing both funding and telescope proposals, organizing meetings and workshops, directing observing runs, and writing and presenting research papers. Ph.D. Thesis:"The optical and Infrared Evolution of Blue Galaxies" (D.C. Koo).

Graduate Student Researcher

Wesleyan University, Middletown Connecticut (1999 – 2001)

Worked closely with advisor to study the chemical properties of nearby star forming galaxies. Developed tools to reduce and measure galaxy spectra. Completed 2 first author papers. Master's Thesis: "Metal Abundances in KISS Galaxies" (J.J. Salzer).

Assistant Researcher for the Supernova Cosmology Project

Lawrence Berkeley National Laboratory (LBNL), Berkeley California (1995 – 1996)

Automated the download and reduction of imaging data from telescopes in Cerro Telolo Chili to Lawrence Berkeley Labs, allowing for a real-time supernova search. In charge of the reduction of follow-up imaging data. (S. Perlmutter)

Undergraduate Student Researcher

University of California Berkeley, Berkeley California (1991 – 1995)

Used narrow-band imaging of comets to understand their composition. (H. Spinrad)

Successful Proposals

Keck Laser Guide Star Adaptive Optics Imaging of Large Disk Galaxies in GOODS-S
Co. Investigator (2005, 2006)

Keck Laser Guide Star Adaptive Optics Imaging of Chandra X-ray Sources in GOODS-S
Co. Investigator (2005, 2006)

Keck Natural Guide Star Adaptive Optics Imaging of Galaxies in GEMS and COSMOS
Co. Investigator (2004, 2005)

Lick Laser Guide Star Adaptive Optics Imaging of Local Blue Compact Galaxies
Principle Investigator (2003, 2004)

Selective Schools and Workshops

The Center for Adaptive Optics Professional Development Workshop (2005)

The Jerusalem Winter School: The Origin of Galaxies (2004)

The Vatican Observatory Summer School: Compact Objects (2001)

Recent Talks

The Center for Adaptive Optics Treasury Survey: AO Imaging of a z=1.3 Supernova
The American Astronomical Society, Washington D.C. (2006)

A Practical Guide to Adaptive Optics Observing on Keck
The Center for Adaptive Optics Extra-galactic AO Workshop, Santa Cruz, California (2005)

Keck Laser Illuminates AGN in the Distant Universe
American Astronomical Society, San Diego, California (2005)

Laser Illuminates Compact Galaxies
Starbursts: From 30 Doradus to Lyman Break Galaxies, Cambridge, United Kingdom (2004)

Teaching Experience

Lead Instructor for The Center for Adaptive Optics Mainland Short Course
University of California Santa Cruz, Santa Cruz, California (2005)

Project Advisor for COSMOS
University of California Santa Cruz, Santa Cruz, California (2003)

Teaching Assistant
University of California Santa Cruz, Santa Cruz, California (2001-2002)