

# DR. KATHERINE ANNE ALATALO

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## Education

University of California, Berkeley	Astrophysics	Ph.D., 2012
University of California, Berkeley	Astrophysics	M.S., 2008
University of Michigan	Physics and Astronomy	B.S. (High Distinction), 2004

## Awards

NSF Graduate Research Fellowship	2006–2009
Phi Beta Kappa	2005
Michigan Space Grant Consortium	2003, 2004

## Professional Memberships

The American Astronomical Society	2003–present
Sigma Pi Sigma, Physics Honor Society	2004–present

## Professional History

Postdoctoral Scholar, Infrared Processing and Analysis Center, Caltech <i>Advisor:</i> Phil Appleton (IPAC, Caltech)	2012–Present
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- Multiwavelength follow-up of AGN feedback in NGC 1266
- Mapping [C II] and [O I] cooling lines from shocks in Hickson Compact Groups

Graduate Student Researcher, UC–Berkeley Dept of Astronomy <i>Advisors:</i> Carl Heiles (UC – Berkeley) & Lisa Young (NMT, NRAO)	2005–2012
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- Mapping molecular gas rich ETGs in the ATLAS<sup>3D</sup> survey using CARMA
- Multiwavelength follow-up of AGN feedback in NGC 1266

Undergraduate Research Assistant, Univ. Michigan Dept of Physics <i>Advisors:</i> Carl Akerlof & Timothy McKay (U. Michigan)	2003–2005
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- Following up optical counterparts to gamma-ray bursts

## Data Experience

- Reduced data from: SMA, EVLA, CARMA, ROTSE, *Herschel* and *Swift* UVOT
- Analyzed: X-ray images & spectra, IR SEDs, UBV photometry, radio & mm images
- Attended: CARMA Summer School (2008), EVLA Synthesis Imaging School (2010) and Winter School in the Canary Islands: Secular Evolution of Galaxies (2011)

## Successful Observing Proposals

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PI, 48 hrs, CARMA	2012
Title: “ <i>Searching for turbulent, shock-heated molecular gas in Hickson Compact Groups through CO mapping</i> ”	
PI, 6 hrs, ALMA Early Science	2011
Title: “ <i>Mapping Shock Chemistry in NGC 1266: Local Example of AGN-driven Feedback</i> ”	
PI, 20 hrs, CARMA	2011
Title: “ <i>NGC524: Testing Theoretical Understanding of SF-ETGs using High Resolution Imaging</i> ”	
PI, 3 orbits, HST ACS, WFC3, Cycle 19 (\$32K)	2011
Title: “ <i>Mapping Recent Star Formation and Dust in NGC 1266, a Local Example of AGN-driven Feedback</i> ”	
PI, 8 hrs, VLBA	2011
Title: “ <i>VLBA Observations of the Unusual Galaxy NGC 1266</i> ”	
PI, 80 hrs, CARMA	2011
Title: “ <i>The physics of AGN feedback in Markarian 231</i> ”	
PI, 32 hrs, SMA	2010–2011
Title: “ <i>High Resolution Observations of the Molecular Outflow in NGC 1266: a Candidate for AGN Feedback</i> ”	
co-I, 6 hrs, EVLA (PI: Morganti)	2010
Title: “ <i>Atomic and molecular outflow in NGC1266</i> ”	
co-I, 12 hrs, EVLA (PI: Young)	2009
Title: “ <i>Mapping HI in the Highly Unusual SB0 NGC1266</i> ”	
PI, 30 ks, Chandra ACIS, Cycle 11 (\$23K)	2009
Title: “ <i>NGC 1266: Local Candidate for AGN Feedback</i> ”	
PI, 300 hrs, CARMA	2008–2011
Title: “ <i>Probing AGN Feedback in Extraordinary S0 NGC1266</i> ”	
co-PI, 500 hrs, CARMA (w/ T. Davis)	2008–2011
Title: “ <i>A Complete Census of Molecular Gas in Local Early-type Galaxies</i> ”	
PI, 100 hrs, CARMA	2007–2008
Title: “ <i>DEEP CO Observations: Fueling Star Formation at <math>z \sim 1</math></i> ”	
PI, 20 hrs, CARMA	2007
Title: “ <i>Probing the Acceleration Mechanisms of Pulsar Wind Nebulae</i> ”	

## Scientific Presentations

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Invited talk. “Galaxies vs Black Holes.” Castellammare del Golfo, Sicily, Italy	2013
Poster. “Infrared and Submillimeter Probes of Gas in Galaxies.” Pasadena, CA	2013
Talk. Friday Lunch Discussion. STSCI. Baltimore, MD	2013
Talk. Monday UVA/NRAO Astronomy Lunch Talks. NRAO. Charlottesville, VA	2013
Poster. 221st AAS Meeting. Long Beach, CA	2013
Talk. First Year of ALMA Science. Puerto Varas, Chile	2012
Poster. XXVIIIth IAU General Assembly. Beijing, China	2012

Talk. Jets 2012. Charlottesville, VA	2012
Talk. Tuesday Bender group talk. MPE, Garching bei München, Germany	2012
Thesis talk. 219th AAS Meeting. Austin, TX	2012
Invited talk. Wednesday astronomy seminar. UC - San Diego, San Diego, CA	2011
Talk. The Starburst-AGN Connection under the Multiwavelength Limelight ESAC–ESA, Villanueva de la Cañada, Spain	2011
Talk. Wednesday Lunch Seminar. NRAO, Socorro, NM	2011
Talk. Extragalactic Discussion Group. Institute for Astronomy, Honolulu, HI	2011
Talk. The Second CARMA Science Symposium. Berkeley, CA	2011
Poster. Extending the Limits of Astrophysical Spectroscopy. Victoria, BC, Canada	2011
Poster. 217th AAS Meeting, Seattle, WA	2011
Talk. Astronomy Seminar. Univ. of Michigan. Ann Arbor, MI	2010
Talk. Astronomy Seminar. Stony Brook University. Stony Brook, NY	2010
Talk. Friday “Lunch” Talk. UMass - Amherst. Amherst, MA	2010
Poster. Molecules in Galaxies. Oxford, England	2010
Talk. Informal Presentation. Owens Valley Radio Observatory. Big Pine, CA	2010
Talk. The First CARMA Science Symposium. U. Illinois, Urbana, IL	2009
Talk. Nearly Normal Galaxies. UC - Santa Cruz, Santa Cruz, CA	2009
Talk. Lunch Talk. Gemini Observatory. Hilo, HI	2009
Poster. Swift and GRBs : Unveiling the Relativistic Universe. Venice, Italy	2006
Poster. Gamma-ray Bursts in the Swift Era. GSFC. Washington, DC	2005

## Teaching & Advising Experience

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Teaching & Lab Assistant, “Radio Astronomy Practical Lab”, UC-Berkeley	Spring 2007
Teaching Assistant, “Introduction to Astrophysics 1”, UC-Berkeley	Fall 2006
Teaching Assistant, “Introduction to Astrophysics 2”, UC-Berkeley	Spring 2006
Teaching Assistant, “Introduction to General Astronomy”, UC-Berkeley	Fall 2005