

KAZIMIERZ (KAZ) SLIWA

PERSONAL INFORMATION

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EDUCATION

PhD 2011–2015 (expected) McMaster University, Hamilton, Canada
Thesis: *Luminous Infrared Galaxies with the Submillimeter Array*
Advisor: Dr. Christine Wilson
MSc 2009–2011 McMaster University, Hamilton, Canada
Thesis: *SMA Observations of the Local Galaxy Merger Arp 299*
Advisor: Dr. Christine Wilson
BSc with distinction 2003–2008 University of Toronto, Toronto, Canada
Description: Majored in astrophysics, physics and chemistry

RESEARCH EXPERIENCE

PhD Thesis 2011–2015 (expected) PhD Thesis, McMASTER UNIVERSITY
Working on interferometric data of several luminous infrared galaxies trying to constrain the physical conditions of the molecular gas.
MSc Thesis 2009–2011 MSc Thesis, McMASTER UNIVERSITY
Worked on interferometric data of the local galaxy merger Arp 299 studying the physical conditions of the molecular gas. Work is now published in Sliwa et al. (2012) in The Astrophysical Journal.
Research Assistant 2009 Research Assistant, UNIVERSITY OF TORONTO
Supervised by Dr. Dae-sik Moon. Worked on spectral data from the Palomar observatory of high mass X-ray binary systems and supernova remnant Cas A.
Research Topic Course 2008–2009 Research Topic Course, UNIVERSITY OF TORONTO
Supervised by Dr. Dae-sik Moon. Worked on spectral data of a high mass X-ray binary system obtained using the Triple Spec spectrometer from the Palomar observatory as well as previous spectral data taken with the Spitzer space telescope.
2008 NSERC Research Assistantship, UNIVERSITY OF TORONTO

Research Assistant

Supervised by Dr. Dae-sik Moon. Worked on spectral data of a high mass X-ray binary system obtained from the Keck observatory. Reduced and extracted the spectrum of the system. Identified several hundred spectral lines.

PUBLICATIONS

Refereed

- 2 **Sliwa, K.**, Wilson, C.D., Krips, M., Pepitpas, G.R., Iono, D., Juvela, M., Matsushita, S., Peck, A.B., and Yun, M., 2013 *Luminous Infrared Galaxies with the Submillimeter Array IV. ^{12}CO J =6-5 Observations of VV 114*, ApJ, 777, 126
- 1 **Sliwa, K.**, Wilson, C.D., Pepitpas, G.R., Armus, L., Juvela, M., Matsushita, S., Peck, A.B., and Yun, M.S, 2012, *Luminous Infrared Galaxies with the Submillimeter Array III. The Kiloparsec Molecular Concentrations of Arp 299*, ApJ, 753, 46

SUCCESSFUL PROPOSALS

Combined Array for Research in Millimeter-wave Astronomy

CARMA

Semester 2013A (c1062) – Granted 27.5 hours
Semester 2013A (c1060) – Granted 19 hours
Semester 2012B (c0988) – Granted 34 hours
Semester 2012A (c0873) – Granted 22 hours

IRAM

IRAM 30m

Project 180-12 – Granted 36 hours

JCMT

James Clerk Maxwell Telescope

Semester 2012B (M12BC14) – Granted 39 hours
Semester 2011A (M11AC06) - Granted 22 hours

SMA

Submillimeter Array

Semester 2012B (S029) – Granted 8 hours

OBSERVING EXPERIENCE

CARMA

July 2013 CARMA

Spent one week as the resident observer where I had the responsibility of running the observatory during the night and day.

IRAM 30m

December 2012 IRAM 30m

Spent 5 days observing my proposed project.

JCMT

November 2012 JCMT

Spent 1 week as the resident observer.

AWARDS

<i>SPICES</i>	2014–2015	Student Proposals for Intellectual Community & Engaged Scholarship	Proposed to fund McMaster’s Sidewalk Astronomy for one year. Awarded \$4,200.
<i>OGS</i>	2013–2014	Ontario Graduate Scholarship	Nominated by McMaster’s Department of Physics and Astronomy. Awarded \$15,000.
<i>SPICES</i>	2013–2014	Student Proposals for Intellectual Community & Engaged Scholarship	Proposed to fund McMaster’s Sidewalk Astronomy for one year. Awarded \$4,000.
<i>QEIGSST</i>	2012–2013	Queen Elizabeth II Graduate Scholarships in Science & Technology	Nominated by McMaster’s Department of Physics and Astronomy. Awarded \$15,000.
<i>NSERC URSA</i>	2008	NSERC URSA	Awarded \$8,200.
CONFERENCES, WORKSHOPS AND PRESENTATIONS			
<i>ESO 3D₂₀₁₄</i>	2014	Gas and stars in galaxies: A multi-wavelength 3D perspective GARCHING, GERMANY	Poster presentation of my PhD research.
<i>NRAO</i>	2014	National Radio Astronomy Observatory TUNA Talk, CHARLOTTESVILLES, VA, USA	Oral presentation of my PhD research.
<i>CASCA</i>	2013	Canadian Astronomical Society (CASCA) Annual Meeting, VANCOUVER, CANADA	Poster Presentation on my PhD project.
<i>Star Formation Jamboree</i>	2013	Star Formation Jamboree, HAMILTON, CANADA	One minute slide introduction on my PhD project.
<i>JAC Seminar</i>	2012	Joint Astronomy Center Seminar, HILO, USA	Talk about my PhD thesis to the Joint Astronomy Center.
<i>Galactic Scale Star Formation</i>	2012	Galactic Scale Star Formation Conference, HEIDELBERG, GERMANY	Poster Presentation on my published paper on Arp 299.
<i>CASCA</i>	2011	Canadian Astronomical Society (CASCA) Annual Meeting, LONDON, CANADA	Poster Presentation on my Master’s thesis.
	2010	McMaster Symposium Day, HAMILTON, CANADA	

McMaster Symposium Day	Poster Presentation on my Master's thesis.
Synthesis Imaging School	<p>2010 Twelfth Synthesis Imaging Summer School, HAMILTON, CANADA</p> <p>Attended lectures and tutorials on how to reduce interferometric data</p>
OUTREACH AND EXTRACURRICULAR	
Sidewalk Astronomy	<p>2012–Present McMaster's Sidewalk Astronomy- Co-Founder/Leader HAMILTON, CANADA</p> <p>Organized and setup weekly public observing using a 30cm telescope on the McMaster campus. Secured funding to purchase another telescope and other equipment. Over 700 people have attended the events as of September 2013.</p>
CUPC Judge	<p>2013 Canadian Undergraduate Physics Conference Judge HAMILTON, CANADA</p> <p>Volunteered to judge talks given by undergraduates from all over Canada.</p>
Science Rendezvous	<p>2013–Present Science Rendezvous HAMILTON, CANADA</p> <p>Science Rendezvous is a day of science all over the city of Hamilton. Helped with scientific activities at a public library.</p>
Planetarium	<p>2010–Present McMaster McCallion Planetarium Presenter HAMILTON, CANADA</p> <p>Present interactive planetarium shows to the public and private groups such as schools, cub scouts and day camps.</p>
LTS	<p>2010–Present Let's Talk Science HAMILTON, CANADA</p> <p>Let's Talk Science is a national organization devoted to improving science literacy by providing science-learning programs to kids. Volunteered to help with the "All Science Challenge Fun House" demonstrating simple science experiments to elementary school kids as they came into the room. Volunteered to help out with "Science Rendezvous", where volunteers take science to the public at various locations around the city.</p>
Softball	<p>2010–Present Physics and Astronomy Departmental Softball Co-Captain HAMILTON, CANADA</p> <p>Joined the departmental softball team playing any position. Co-captained the team which meant making the lineup for the games and leading team practices.</p>
Venus Transit	<p>2012 McMaster Venus Transit Public Viewing HAMILTON, CANADA</p> <p>Volunteered to help out with the public viewing of the transit of Venus across the Sun, a twice in a lifetime event, with the departmental 30 cm telescope. Helped with setting up and running the telescope as well as answering questions the public had to ask.</p>
Conference	<p>2012 Origins Institute Star Formation Conference HAMILTON, CANADA</p> <p>Volunteered to help out with the audio during the conference and guiding participants around the campus.</p>

Mentor

2012–Present Departmental Graduate Student Mentor
HAMILTON, CANADA

Volunteered to mentor an incoming graduate student to the department.

*Science and
Engineering
Olympics*

2011–Present McMaster Science and Engineering Olympics
HAMILTON, CANADA

An event held on the McMaster campus that hosts various science and engineering activities that high school kids take part in and compete against other schools. Volunteered to help out with the “Physics Paper Triathlon” where I was in charge of the bridge building competition. The kids were required to build a paper bridge that could hold up several marbles.

WORK EXPERIENCE

AST1F03

2013–Present Introductory Astronomy and Astrophysics TA
(AST1F03) MCMASTER UNIVERSITY

Held office hours to help students with questions. Gave planetarium shows and ran observing sessions. Responsible for marking assignments, midterms and final exam.

Drop-in Center

2013–Present Drop-in Center TA MCMASTER UNIVERSITY

Helped undergraduate students from various physics courses with questions.

PHY1D03

2009–2013 Introductory Mechanics TA (PHY1D03)
MCMASTER UNIVERSITY

Helped students with physics problems. Demonstrated the use of certain lab equipment. Responsible for marking quizzes, lab reports, term tests and exams.

PHY1E03

2010–Present Waves and Electromagnetism TA (PHY1E03)
MCMASTER UNIVERSITY

Helped students with physics problems. Demonstrated the use of certain lab equipment. Responsible for marking quizzes, lab reports, term tests and exams.

PHYA10

2007–2008 Introduction to Physics I TA (PHYA10)
UNIVERSITY OF TORONTO

Prepared weekly quizzes. Demonstrated the use of certain lab equipment as well as Mac OS. Marked quizzes, lab reports and lab notebooks.

March 20, 2014