

O. Ivy Wong

Curriculum Vitae

Astronomy Department
Yale University
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Current position

Yale University
Postdoctoral associate (3 year position) Sept 2007 – present

Education

University of Melbourne (Australia) 2004 – 2007
PhD in Astrophysics
Thesis: Star formation and galaxy evolution of the Local Universe
based on HIPASS
Supervisor: Prof Rachel L. Webster

University of Melbourne (Australia) 2002 – 2003
MSc in Astrophysics
Thesis: Radio spectra and variability in a complete sample of flat-
spectrum sources
Supervisor: Prof Rachel L Webster

University of Melbourne (Australia) 1998 – 2001
BSc (Hons) in Physics
Thesis: Constraints on the mass of the Milky Way from high-velocity
stars
Supervisor: Dr Michael Drinkwater

Research experience

Postdoctoral associate research on the star formation properties of
Virgo Cluster galaxies with Prof Jeff Kenney (Yale University) 2007 – present

Postgraduate research with Prof Rachel Webster on an all-sky
neutral Hydrogen survey, HIPASS (University of Melbourne) 2004 – 2007

Postgraduate research with Dr Gerhardt Meurer on a UV star
formation study of HIPASS-selected galaxies, SUNGG (Johns
Hopkins University) 2005 – 2006

Postgraduate researcher with Prof Rachel Webster on AGN
variability and radio spectra of AGN (University of Melbourne) 2002 – 2003

Research assistant with Dr Werner Collmar & Prof Volker Schoenfelder
working on the EGRET pipeline (Max-Planck Institut fuer
extraterrestrische Physik, Garching) 2002

Undergraduate research with Dr Michael Drinkwater on the high
velocity stars discovered in the Fornax Cluster Spectroscopic Survey
(University of Melbourne) 2001

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Undergraduate research with Prof Rachel Webster on HIPASS (University of Melbourne)	1999 – 2000
Undergraduate research with Dr Michael Drinkwater on galaxy spectra from the Virgo Cluster (University of Melbourne)	1999 – 2000

Research interests

Multiwavelength studies of galaxy evolution and star formation in order to study the stellar, gas and dust properties

Galaxies: evolution, star formation rates, environmental effects, dust and gas morphologies & ring galaxies

Cosmology: star formation rate density and history of the Local Universe

AGN: Radio spectra and variability

Milky Way: high velocity stars, escape velocity and mass

Surveys: Neutral Hydrogen, H-alpha emission line, UV continuum, mid-to-far infrared and radio continuum

Awards

Postgraduate Overseas Research Experience Scholarship (spent a year at Johns Hopkins University)	2005
Melbourne University Research Scholarship	2004 – 2007
Dieul-Kurzweil Scholarship	2003
Special Postgraduate Studentship	2002
University of Melbourne Summer Vacation Scholarship in Astrophysics	1999 – 2000

Recent invited colloquia and seminars

Astronomy seminar	Queens University (Canada), November 2008
YCAA seminar	Yale University, September 2007
Friday lunch seminar	NOAO, September 2007

Recent conferences and workshops

When the Universe formed stars	Martinique, November 2008
Tri-State Astronomy conference	CUNY, NY, October 2008
Evolution of galaxies through the neutral Hydrogen window	Arecibo, Puerto Rico, March 2008
Spitzer Conference: the evolving ISM in the Milky Way and nearby galaxies	Pasadena, CA, December 2007
Galaxies in the local Volume	Sydney, Australia, July 2007
IAU 244: dark galaxies and lost baryons	Cardiff, UK, June 2007
AAS Meeting 207	Washington D.C., January 2006
Summer school in statistics for astronomers & physicists	PSU, PA, June 2005

Teaching experience

Substitute lecturer (Astronomy 130: Life in the Universe) for Prof Sabatino Sofia at Yale University	Fall 2008
Teaching assistant (Astronomy 120: Galaxies and the Universe) at Yale University	Spring 2008
Laboratory Demonstrator and tutor for undergraduate Physics at the University of Melbourne (includes being the coordinator of the 1st year undergraduate astrophysics laboratory and conducting observing sessions)	2001 – 2004

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Public outreach

- Invited talk to Year 11 Physics students at Leibler Yavneh High School on star formation 2006
- Invited talk to Year 11 Physics students at Presbyterian Ladies College on life as an astronomer 2006
- Invited astronomer to Coburg West Primary School for an astronomy night which includes an observing session (for 450 students, parents & teachers) 2006
- Mentoring a Year 10 student from MacRobertson High School aspiring to be a researcher 2006

Observing experience

- WIYN 3.5m telescope: OPTIC imager 2008
- WIYN 3.5m telescope: SparsePak imager/spectrograph 2007
- Parkes radio telescope: narrowband spectral line & continuum observations 1999, 2000, 2002, 2004, 2005
- Australia Telescope Compact Array: spectral line observations 2004
- MSSSO 40-inch telescope: wide-field imager (WFI) 2006
- MSSSO 40-inch telescope: optical imager 2001, 2004
- MSSSO 2.3m telescope: optical imager, double-beam spectrograph, CASPIR 2003
- MSSSO 2.3: NIR imager 2001

Refereed publications

The volume densities of giant molecular clouds in M83

J. S. Heiner, R. J. Allen, **O. I. Wong** & P. C. van der Kruit, 2008, A&A, 489, 533

Northern HIPASS catalogue—Data presentation, completeness and reliability

O. I. Wong, E. V. Ryan-Weber, D. A. Garcia-Appadoo, R. L. Webster, L. Staveley-Smith, M. A. Zwaan, M. J. Meyer, D. G. Barnes, V. A. Kilborn, R. Bhathal, W. J. G. de Blok, M. J. Disney, M. T. Doyle, M. J. Drinkwater, R. D. Ekers, K. C. Freeman, B. K. Gibson, S. Gurovich, J. Harnett, P. A. Henning, H. Jerjen, M. J. Kesteven, P. M. Knezek, B. S. Koribalski, S. Mader, M. Marquarding, R. F. Minchin, J. O'Brien, M. E. Putman, S. D. Ryder, E. M. Sadler, J. Stevens, I. M. Stewart, F. Stootman, M. Waugh, 2006, MNRAS, 371, 1855

NGC922—A new drop-through ring galaxy

O. I. Wong, G. R. Meurer, D. J. Hanish, R. C. Kennicutt, J. Bland-Hawthorn, E. V. Ryan-Weber, B. S. Koribalski, V. A. Kilborn, M. E. Putman, J. S. Heiner, R. L. Webster, R. J. Allen, M. A. Dopita, M. T. Doyle, M. J. Drinkwater, H. C. Ferguson, K. C. Freeman, T. M. Heckman, C. Hoopes, P. M. Knezek, M. J. Meyer, M. S. Oey, M. Seibert, R. C. Smith, L. Staveley-Smith, D. Thilker, J. Werk, M. A. Zwaan, 2006, MNRAS, 370, 1607

A catalog of HI-selected galaxies from the South Celestial Cap region of Sky

V. A. Kilborn, R. L. Webster, L. Staveley-Smith, M. Marquarding, G. D. Banks, D. G. Barnes, R. Bhathal, W. J. G. de Blok, P. J. Boyce, M. J. Disney, M. J. Drinkwater, R. D. Ekers, K. C. Freeman, B. K. Gibson, P. A. Henning, M. Howlett, H. Jerjen, P. M. Knezek, B. S. Koribalski, D. F. Malin, R. F. Minchin, J. R. Mould, J. C. O'Brien, T. Oosterloo, P. F. Ortiz, R. M. Price, M. E. Putman, S. D. Ryder, E. M. Sadler, I. M. Stewart, F. Stootman, **O. I. Wong**, A. E. Wright

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Submitted publications and publications in preparation

The star cluster population of the collisional ring galaxy NGC922

A. Pellerin, G. R. Meurer, K. Bekki, D. M. Elmegreen, **O. I. Wong**, P. M. Knezek, 2008, submitted to *AJ*

NOIRCAT—The Northern HIPASS Optical/IR Catalogue

O. I. Wong, R. L. Webster, V. A. Kilborn, M. Waugh, L. Staveley-Smith, 2008, submitted to *MNRAS*

Evidence for a non-uniform Initial Mass Function in the Local Universe

G. R. Meurer, **O. I. Wong**, J. H. Kim, D. J. Hanish, T. M. Heckman, J. Werk, J. Bland-Hawthorn, M. A. Dopita, M. A. Zwaan, B. Koribalski, M. Seibert, D. A. Thilker, H. C. Ferguson, R. L. Webster, M. E. Putman, P. M. Knezek, M. T. Doyle, M. J. Drinkwater, C. G. Hoopes, V. A. Kilborn, M. Meyer, E. V. Ryan-Weber, R. C. Smith, L. Staveley-Smith, 2008, submitted to *ApJ*

The survey of ultraviolet emission in neutral gas galaxies: description and results

O. I. Wong, G. R. Meurer et al. in preparation

The Spitzer survey of Virgo Cluster spirals

J. D. P. Kenney, **O. I. Wong** et al. in preparation

The survey of ultraviolet emission in neutral gas galaxies: the star formation rate density

O. I. Wong, G. R. Meurer et al. in preparation

Unrefereed conference proceedings and poster presentations

HI-star formation connection: Open questions

G. R. Meurer, **O. I. Wong**, D. J. Hanish, 2008, Proceedings for “The Evolution of galaxies through the Neutral Hydrogen window” meeting in Arecibo, Puerto Rico

Spitzer observations of environmental effects on Virgo Cluster galaxies

J. D. P. Kenney, **O. I. Wong**, A. Abramson, J. H. Howell, E. J. Murphy, G. X. Helou, 2008, Proceedings for “The Evolving ISM in the Milky Way and nearby galaxies” in Pasadena, CA

A Spitzer study of star-forming regions in Virgo Cluster galaxies

O. I. Wong, J. D. P. Kenney, 2008, Proceedings for “The Evolving ISM in the Milky Way and nearby galaxies” in Pasadena, CA

The Northern HIPASS Optical/IR Catalogue (NOIRCAT)

O. I. Wong, R. L. Webster, M. Waugh, V. A. Kilborn, L. Staveley-Smith, 2007, Proceedings for “Dark galaxies and lost baryons”, IAU Symposium 244, Cardiff, UK

The UV luminosity density of the Local Universe from an HI-selected sample

O. I. Wong, G. R. Meurer, D. J. Hanish & the SUNGG team, 2006, AAS Meeting 207, Washington D. C., USA

Multifrequency observations of the gamma-ray blazar 3C279 in low state during INTEGRAL AO-1

W. Collmar, M. Boettcher, V. Burwitz, T. Courvoisier, S. Komossa, P. Kretschmar, E. Nieppola, K. Nilsson, T. Ojala, K. Pottschmidt, M. Pasanen, T. Pursimo, A. Sillanpaa, L. Takalo, M. Tornikoski, H. Ungerechts, E. Valtaoja, R. Walter, R. Webser, M. Whiting, K. Wiik, **I. Wong**, 2004, Proceedings of the 5th INTEGRAL workshop on the INTEGRAL Universe, Munich, GERMANY

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Mass of the Milky Way

O. I. Wong, M. J. Drinkwater, J. B. Jones, M. D. Gregg, K. C. Freeman, 2003, 25th IAU Symposium 220, Sydney, AUSTRALIA

Radio spectra of the Parkes Half-Jansky Flat-Spectrum Sample

O. I. Wong, R. L. Webster, 2003, 25th IAU Joint Discussion 18, Sydney, AUSTRALIA

Scientific and departmental activities

Colloquium organizer, Yale University

2008 – 2009

Member, American Astronomical Society (AAS)

Member, Astronomical Society of Australia (ASA)

Member, Australian Institute of Physics (AIP)

Referee for Astronomy & Astrophysics

Languages

English (native), basic proficiency in Japanese, Malay, French and spoken Cantonese

Referees

Prof Rachel Webster

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Prof Jeffrey Kenney

Department of Astronomy, Yale University, New Haven, CT 06520-8101

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Dr Gerhard Meurer

Department of Physics & Astronomy, Johns Hopkins University, Baltimore, MD 21218

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