

Curriculum Vitae



Department of Physics
The University of Hong Kong

Professor Quentin A Parker - 3 -page CV & Track Record

Current Position: Professor, Department of Physics, Hong Kong University

Academic Qualifications: BSc (Honours), PhD, St.Andrews, UK 1982; 1986

Employment history & Current employment

Higher/Senior Scientific Officer	Royal Observatory Edinburgh	1986-1992; 1996-2002
Astronomer/Senior Astronomer	Anglo-Australian Observatory	1992-1995; 1996-1999*
Lecturer/Senior Lecturer	Macquarie University/AAO	2002-2003; 2004-2006
Associate Professor	Macquarie University/AAO	2007-2009
Professor	Macquarie University/AAO	2010-2015
Professor	Hong Kong University	2015 - present

* (on special leave from the Royal Observatory Edinburgh)

Main areas of disciplinary/sub-disciplinary research expertise

Wide-field, multi-wavelength astronomical surveys, Planetary Nebulae and late stage stellar evolution, Supernova remnants, Galactic archaeology, low-surface brightness galaxies, galaxy redshift surveys, Astronomical instrumentation particularly multi-object fibre-based systems and integral field units, science education and pedagogy (high school).

Five-year major Grant Track Record – total value: ~10M SAUD in mainstream astronomy research, science education and astronomical instrumentation

ARC LE140100052:	2014	CIs Colless, + Parker et al. \$350K
OLT Teaching grant:	2013-2016	CIs Mulligan, Parker, Hedberg, Cody, \$2.45m
MQAAAstro centre:	2011-2015	CI Parker, \$300K
Guttenberg Chair:	2013	CI Parker \$80K (Strasbourg, France)
ARC LE130100198:	2013	CIs Bland-Hawthorn, Croom, Jones, Parker+ \$315K
ARC DP120103751:	2012-2014	CIs Ireland, Parker, Bedding \$355K
ARC DP120104416:	2012-2013	CIs Freeman, Parker, Bland-Hawthorn \$280K
ARC LE120100023:	2012	CIs Bessell, Dopita, Parker et al \$185K
ARC LE110100030:	2011-2012	CIs Parker et al. \$350K ARC + 4450K MQ/AAO+
ARC FS100100019:	2010-2013	CIs Parker et al. \$280K ARC + \$229K MQ/AAO
ARC LP0989264:	2009-2011	CIs Parker et al. \$677K cash, \$1.6M in kind
NASA ROSES07:	2008-2010	CIs Cohen, Parker, Green \$540K (\$330K US)
NASA SPITZER:	2008-2009	CIs Cohen, Hora, Parker \$150K (\$100K US)
MQSN/MQRDG:	2008-2010	CI Parker \$64K
ARC DP0772283:	2007-2010	CIs Freeman, Parker et al. \$880K
ARC LE0775523:	2007-2008	CIs Parker, Freeman et al. \$443K
ARC LX0561261:	2006-2009	CIs Parker, Sadler, Hunstead \$63K

Teaching experience (at Macquarie University)

Degree director Astronomy & Astrophysics 2007- 2012

Course convenor and lecturer ASTR170 (prev PHYS270) from 2003 – current

Course convenor and lecturer ASTR278 (prev PHYS278) from 2003 – 2011

Lecturer ASTR278 (2011-2012) ; PHYS 242 (2006-2009); ASTR178 (2009-2010)

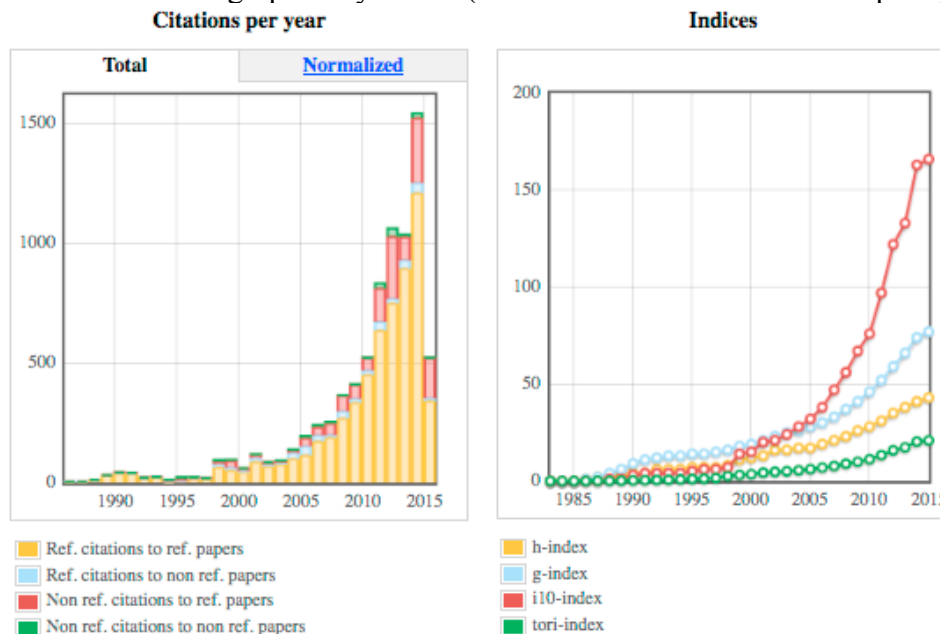
Honours course Astrophysics-III: Astrophysics of Gaseous Nebulae 2003-2010

Research supervision and management

I am currently supervising 2 Research Assistant Professors and 3 PhD, students. To date I have had 12 HDR and 6 honours student completions since December 2005 (100% success).

Five-year Publication Track Record

In the last 5 years I have 105 refereed journal articles and am 1st, 2nd or 3rd author for 26 of these (NASA ADS abstract service http://adsabs.harvard.edu/abstract_service.html). My total publications comprise 468 articles with 216 in referred journals and >7915 citations (50% increase in 3 years) with an 'h' index of 43 shown graphically below (note results for 2015 are incomplete).



Teaching Metrics: Evidence of sustained contributions to student learning over time

This is demonstrated by my consistently very high scores from Teaching Evaluation and Development Scheme (TEDS) over the last 10 years. My average TEDS score from 11 sets of results from my courses is 4.3, sigma=0.2. I recognise the importance of TEDS feedback from students and see it as an invaluable means to reflectively identify (and hopefully rectify) any teaching shortcomings and to improve and inform future delivery and learning outcomes. Overall my lowest average TEDS mark was 4.1 and highest 4.6 out of a maximum of 5. This is deemed to be an excellent and continuing set of TEDS scores that clearly verifies consistent, sustained, high-level teaching achievement as perceived by the students themselves. This formed a key part of the evidence that led to my undergraduate teaching awards. *“On the Learning and Teaching side I have had the chance to personally observe his infectious enthusiasm and excitement he seems able to instil in all his PhD, honours and undergraduate students” Prof.E.Goldys, MQ (2009).*

Fellow of learned academies or societies

- Fellow of the Royal Astronomical Society (1988 -)
- Fellow of the Astronomical Society of Australia (1994-)
- Member of the International Astronomical Union (1995-)

Invited keynote/plenary/review speaker at international conferences and workshops

Attended 10 major conferences with 8 as an invited reviewer/speaker since 2006:

- Invited review at IAU Symposium 234 on Planetary Nebulae, Hawaii, April 2006
- Invited review at the MASH workshop in February 2009
- Invited speaker at Galactic archaeology meeting, Cairns, May 2009 (invitation only)
- Invited speaker to conference on Astrophysics at Monash, August 2009
- Invited review at Asymmetric PN IV conference in UK, June 2010.
- Contributed speaker international Supernova conference, Sydney, June 2011
- Invited review speaker IAU Symposium 283 on Planetary Nebulae, Tenerife, July 2011
- Review speaker Late phases of stellar evolution, Macquarie, Dec 2011
- Contributed speaker: APN VI, Mexico, November 2013; ASA Sydney, July 2014

Current/recent senior community responsibilities (inc. financial management and advising)

- Head of Macquarie/AAO/Strasbourg H α Planetary Nebulae project: MASH (team of 15)
- Chair of IAU sky surveys working group under Commission IX 2004 - present
- Member of IAU working group on PN research 2006 - present
- Head of data management group of international Radial Velocity Experiment (RAVE)
- Head of the IPHAS Planetary Nebulae Team (20 researchers in 5 countries)
- Chief CI for KOALA Intergral field unit instrument at the AAO (2011 – 2015)
- Director of \$2.4M ARC linkage science pedagogy project “Space to Grow” (2009-2014):
- Member of Macquarie University Teaching Excellence Academy – 2012 onwards
- Member of 6DF Science Advisory Committee 2002 - present
- Technical assessor for time on Anglo-Australian Telescope 2002 – 2015
- External PhD examiner (e.g. Manchester University, UK 2010, 2011, Bristol, Marseille)
- Regular referee of papers in top astronomy journals (e.g. MNRAS, ApJ, A&A)
- ARC international reader and laureate, DP and linkage assessor (2004 – 2015)
- Chair of MQAAAstro research centre executive board (2011- 2015)
- Member MQ research centre assessment panel (2012 – 2015)

Professional Prizes and Awards

- Recipient of divisional award for excellence in undergraduate teaching 2007 \$5K
- Recipient of Vice Chancellors award for excellence in PhD supervision 2008 \$10K
- Highly commended for University Innovations in Learning and Teaching 2009
- Shortlisted for University Innovations Award in Research & Engineering 2010
- Recipient of University Innovations awards for Excellence in Research 2011 \$3K
- ALTC peer reviewed citation for excellence in undergraduate learning 2011 \$10K
- Recipient of Vice Chancellors award for excellence in undergraduate Teaching 2012 \$10K
- Award of prestigious Gutenberg Professorial Chaire, Strasbourg, France 2013 \$80K
- Recipient of Jim Piper award for excellence in Research Leadership 2014 \$3K

Invited Professorships

Received invited Professorships to Universite de Strasbourg, France, annually since 2002. In 2012 I was the only invited Professor supported to go to Strasbourg Observatory.

External benchmarking of standing

- Received top rank of 5 in the MQ/Newcastle RQF trial in November 2007 awarded for research considered world leading and falls within the top 10% of research in its field internationally.
- Was ranked 6th out of the 500 research active staff in the entire MQ Faculty of Science in the 2012 internal assessment exercise.

Peer reviewed facility access won 2009-2014 – total access costs value ~\$3M

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| • 7 nights 6-8-m time | Magellan, Gemini & ESO VLT | \$650K |
| • 16 nights 4-m time | CTIO & AAT | \$480K |
| • 130 nights 2-m time | ANU 2.3m & SAAO 1.9m telescopes | \$1.30M |
| • 205 hours radio | Australia Telescope Compact Array | \$100K |
| • 70+ hours | Hubble and Herschel space telescopes | \$500K |

See further information at: <http://hub.hku.hk/cris/rp/rp02017/>

and <http://physics.mq.edu.au/astronomy/space2grow/> for “Space to Grow”