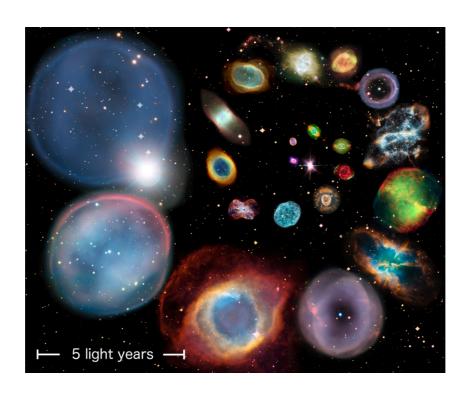
# **Curriculum Vitae**Quentin Andrew Parker

# From Research and Teaching to Academic & Scientific Leadership



# **WHOIAM**



If I were to try to summarize myself in terms of who I am and how I operate via a series of sound-bites it would be this:

- Enthusiastic, good humoured, motivated, focused and passionate; seizing opportunity decisively and with a strongly entrepreneurial approach
- Highly articulate in both written and spoken English and bi-lingual (French) with a highly developed multi-cultural and interdisciplinary perspective
- Rigorously across detail and forensic attention to detail with both big picture and marginal gains approach leading to high-level organizational success
- Collegiate, pastoral, motivating, inclusive; willing to help others and with strong empathy
- Robust and professional under difficult circumstances; convincing and persuasive
- Ability to build, organise and deliver capacity across multiple endeavours
- Curious, strategic, agile, reflective and action oriented but with an open minded approach with willingness to support novel and visionary ideas
- Demonstrated excellence in research leadership and strongly collaborative
- Base positive character of honesty, integrity and generosity
- Comfortable and respectful in all environments and at every level from chatting with the cleaner to chairing executive meetings and hosting international delegations
- Highly international in outlook and experience and highly evidence based in approach and implementation

Some of this evidence is elucidated below but can be expanded in more detail in a full portfolio. This should demonstrate clearly my credentials, aptitude and capacity to fulfill a senior role

#### **Current Position**

Associate Dean (Global), Faculty of Science, Hong Kong University; Director, Laboratory for Space Research; member academic senate

# **Academic Qualifications**

BSc (Honours), 1982; PhD 1986, St. Andrews University, UK

#### **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/Director MQAASAstro#                                                      | Macquarie University/AAO     | 2010-2015             |  |  |  |
| Professor/HoD Physics                                                               | The University of Hong Kong  | 2015-2016             |  |  |  |
| Professor/Assoc.Dean (global)                                                       | The University of Hong Kong  | 2017-                 |  |  |  |
| * (on special leave from the Royal Observatory Edinburgh in a parallel appointment) |                              |                       |  |  |  |

<sup>(</sup>on special leave from the Royal Observatory Edinburgh in a parallel appointment)

# Main areas of disciplinary/sub-disciplinary and interdisciplinary research expertise

Wide-field, multi-wavelength astronomical surveys, Planetary Nebulae and late stage stellar evolution, Space Science, Supernova remnants, Galactic archaeology, low-surface brightness galaxies, galaxy redshift surveys, Astronomical instrumentation particularly narrow-band filters, multi-object fibre-based spectroscopy systems and integral field units, science education and pedagogy (high school and tertiary), Chinese bronze antiquities and interdisciplinary studies.

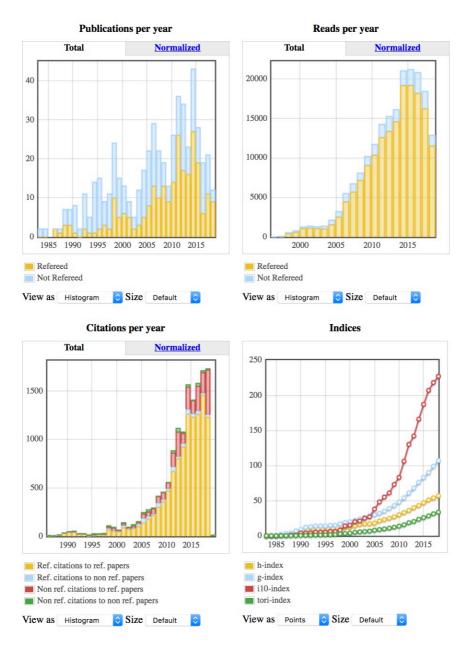
# Eight-year research grant track record has total value: ~51M\$ HKD (~\$8.87M AUD) in astronomical instrumentation, astrophysics research and science education

| UGC T&L (HK):       | 2017-2020 | CIs Parker, Knothe, Lee, \$3.314M HKD             |
|---------------------|-----------|---------------------------------------------------|
| RGC (HK) 17304018:  | 2018-2021 | CIs Parker, Zijlstra, Gesicki, \$520K HKD         |
| RGC (HK) 17300417:  | 2017-2020 | CIs Parker, Zijlstra, Frew \$520K HKD             |
| RGC (HK) 17326116:  | 2016-2018 | CIs Parker, Frew, Bojicic \$540K HKD              |
| PDF award (HKU):    | 2016-2020 | CIs Parker, Kwok and Wu \$1M HKD                  |
| PDF award (HKU):    | 2017-2021 | CIs Lee, Parker, Knothe \$1M HKD                  |
| ARC LEI40100052:    | 2014      | CIs Colless, + Parker et al. \$350K HKD           |
| OLT Teaching grant: | 2013-2016 | CIs Mulligan, Parker, Hedberg, Cody \$15M HKD     |
| MQAAAstro centre:   | 2011-2015 | CI Parker, \$1.85M HKD                            |
| Guttenberg Chair:   | 2013      | CI Parker \$650K HKD (Strasbourg, France)         |
| ARC LE130100198:    | 2013      | CIs B-Hawthorn, Croom, Parker+ \$2M HKD           |
| ARC DP120103751:    | 2012-2014 | CIs Ireland, Parker, Bedding \$2.13M HKD          |
| ARC DP120104416:    | 2012-2013 | CIs Freeman, Parker, B-Hawthorn \$1.7M HKD        |
| ARC LE120100023:    | 2012      | CIs Bessell, Dopita, Parker et al \$1.1M HKD      |
| ARC LE110100030:    | 2011-2012 | CIs Parker et al. ARC + MQ/AAO for \$4.8M HKD     |
| ARC FS100100019:    | 2010-2013 | CIs Parker et al. ARC + MQ/AAO for 3.1M HKD       |
| ARC LP0989264:      | 2009-2011 | CIs Parker et al. \$677K cash, \$9.6M HKD in kind |
| NASA ROSES/Spitzer: | 2008-2010 | CIs Cohen, Parker, Hora, Green \$1.8M HKD         |
| MQSN/MQRDG:         | 2008-2010 | CI Parker \$384K HKD                              |
|                     |           |                                                   |

<sup>#</sup> MQAAAstro: The Macquarie Research centre in Astronomy, Astrophysics and Astrophotonics

### **Five-year Research Publication Track Record**

In the last 5 years I have 81 refereed journal articles and am 1<sup>st,</sup> 2<sup>nd</sup> or 3<sup>rd</sup> author for 16 of these (NASA ADS abstract service <a href="http://adsabs.harvard.edu/abstract\_service.html">http://adsabs.harvard.edu/abstract\_service.html</a>). My total publications comprise 539 papers, articles and circulars with 254 in referred journals and >14335 citations (40% increase in 3 years) with an 'h' index of 57 as shown graphically below (results for October 10<sup>th</sup> 2018). Google scholar gives me a h-index of 62 and >16000 cites.



# Research supervision and management

I am supervising 4 Post Doctoral Fellows and 4 PhD students (including one at MQ). Since 2005, as primary supervisor I have had 11 PhD, 3 Masters and 6 honours student completions (100% graduation success) with many more as adjunct/associate supervisor. I am leading and managing the Laboratory for Space Research (LSR) where we are currently undergoing expansion. We have recently signed several important MoUs (e.g. with Nanjing, Padova-CISAS) and are engaging in key satellite programs (DAMPE and HKU No.1 satellite).

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

Awarded several university and national teaching awards at both undergraduate and postgraduate level at Macquarie University. This was partially due to consistently very high scores from Teaching Evaluation and Development Scheme (TEDS) over the last 10 years. This is continuing at HKU where my scores for teacher effectiveness in 2016/17 was 86/100 (c.f. average for the Physics department of 72). This clearly testifies to high-level, consistent and on-going teaching achievement as perceived by the students themselves. A few recent feedback comments from HKU students include: "What a wonderful, engaging, interesting and inspiring teacher"; "very captivating teaching - can get the attention of the students very quickly"; "Really captivating and interesting lectures", my HKU SCNC1113 students (2016).

# 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 )
- Member of the Oriental Ceramics Society of Hong Kong (2015 )

# Invited keynote/plenary/review speaker at international conferences and workshops Since 2010 attended 18 major conferences/workshops with 13 as invited reviewer/speaker

- 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, December 2011, SOC chair
- Contributing speaker APN VI, Mexico, November 2013 and member SOC
- Contributing speaker ASA Sydney, July 2014 (and SOC chair and LOC chair)
- Invited speaker EGAPS meeting, Graz Austria, September 2015
- Invited speaker 11<sup>th</sup> Pacific Rim Conference, December 2015, Hong Kong
- Invited speaker WorkPlans PN meeting, Lorentz Centre, Leiden, Holland, January 2016
- Invited speaker 18th and 19th PHSK meetings, Poly U. 2015, HKU 2016
- Contributing speaker (as on SOC) of IAU Symposium 323, Beijing October 2016
- Invited speaker, KAVLI 10<sup>th</sup> Anniversary meeting, Beijing, May 2017
- Invited speaker, Belt and Road forum of Hangzhou, Hong Kong, August 22<sup>nd</sup> 2017
- Invited speaker, "with one had waving free", Port Douglas, Australia, October 2017
- Contributing speaker (as co-chair of SOC), "APNVII", Hong Kong, Dec 2017
- Invited honorary speaker, Lobster eye telescope meeting, Shenzen, January 2018
- Invited speaker, PHSK, Macau, Guangzhou Physics societies meeting, Macau, July 2018

#### Peer reviewed facility access won 2010-2018 - total access costs value \$22M HKD

| • | 10 nights 6-10m time | Magellan, Gemini, Grantecan & ESO VLT | \$5.6M HKD |
|---|----------------------|---------------------------------------|------------|
| • | 16 nights 4m time    | CTIO & AAT                            | \$2.9K HKD |
| • | 162 nights 2m time   | ANU 2.3m & SAAO 1.9m telescopes       | \$9.8M HKD |
| • | 205 hours radio      | Australia Telescope Compact Array     | \$600K HKD |
| • | 70+ hours            | Hubble and Herschel space telescopes  | \$3.0M HKD |
| • | 3 hours              | Directors Discretionary time SALT 10m | \$100K HKD |

### Professional Prizes and Awards for research, teaching and leadership (\$4.55M HKD)

- MQ Divisional award for excellence in undergraduate teaching 2007 \$180K
- MQ Vice Chancellors award for excellence in PhD supervision 2008 \$180K
- MQ Highly commended for University Innovations in Learning and Teaching 2009
- MQ Shortlisted for University Innovations Award in Research & Engineering 2010
- MQ Recipient of University Innovations awards for Excellence in Research 2011 \$120K
- Australian "ALTC" citation for excellence in undergraduate Learning 2011 \$360K
- MQ Vice Chancellors award for excellence in undergraduate Teaching 2012 \$360K
- Prestigious Gutenberg Professorial Chair, Strasbourg, France 2013 \$3.2M
- MQ University "Jim Piper" award for excellence in Research Leadership 2014 \$120K
- HKU Sino-British fellowship 2018 \$25K

# Current/recent senior responsibilities (including financial management & advising)

- Associate Dean (Global) Faculty of Science, HKU (2017 )
- Director, Laboratory for Space Research, HKU (2018 ) was associate Director prior
- Member of HKU Academic Senate (2016 )
- Chair HKU Science faculty committee on global development & engagement (2017 )
- Chair HKU Disciplinary Committee (2018 )
- Member HKU rankings committee (2017 )
- Member HKU Vice President's (Global) committee (2017-)
- Member HKU disciplinary committee (2015 -)
- Member Faculty Teaching and Learning Quality Committee (2016 -)
- International member of South African Telescopes User committee (2015 -)
- Head of Hong-Kong/AAO/Strasbourg Hα Planetary Nebulae project: HASH (2015 )
- Head of the Department of Physics, HKU (2015-2016)
- Head of data management group of international Radial Velocity Experiment (RAVE)
- Head of the IPHAS Planetary Nebulae Team (20 researchers in 5 countries)
- 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, AJ)
- Member of executive committee of the Physical Society of Hong Kong (2015 2017)
- CI for KOALA Integral field unit instrument at the AAO (2011 2015)
- Member of Macquarie University Teaching Excellence Academy 2012-2015
- Member of 6DF Science Advisory Committee 2002 2015
- Technical assessor for time on Anglo-Australian Telescope 2002 2015
- ARC international reader and laureate, DP and linkage assessor (2004 2015)
- Director of MQAAAstro research centre and chair of executive board (2011- 2015)
- Member Macquarie University research centre assessment panel (2012 2015)
- Director of \$2.4M ARC linkage science pedagogy project "Space to Grow" (2009-2014)

# **External benchmarking of standing**

• I am currently ranked 37<sup>th</sup> of all HKU researchers according to Google Scholar out of 3493 academics. This places me in the top 1.1% at a top 30 global university (QS and THE rankings 2018).