

Dr. Khaled Said

Contact Information	Taipan Postdoctoral Fellow The Gruber Foundation IAU Fellow Research School of Astronomy & Astrophysics, The Australian National University Mt Stromlo Observatory Cotter Rd, Weston Creek, ACT 2611, Australia	<i>Nationality:</i> Egyptian <i>Mobile:</i> +61 426 774 794 <i>E-mail:</i> khaled.said@anu.edu.au <i>WWW:</i> mso.anu.edu.au/~khaled
Research Interests	<ul style="list-style-type: none">• Large Scale Structure and Galaxy Flows.• Photometric and Spectroscopic Surveys.• Observational Cosmology.• Galaxy Formation and Evolution.	
Research Appointments	The Australian National University, Canberra ACT, Australia <ul style="list-style-type: none">• The 2017 Gruber Foundation IAU Fellow• Taipan Postdoctoral Research Fellow with Prof. Matthew Colless. July 2017 – present	
Teaching Appointments	The Australian National University, Canberra ACT, Australia <ul style="list-style-type: none">• Invited lecturer<ul style="list-style-type: none">• Astronomy ASTR3002 - <i>Galaxies and Cosmology</i> Second Semester 2019 University of Cape Town, Rondebosch, Cape Town, South Africa <ul style="list-style-type: none">• Teaching Assistant<ul style="list-style-type: none">• Astronomy 2002H - <i>Introduction to Modern Astrophysics</i>. Fall 2013 & 2014• Physics 1012F - <i>Mechanics for Engineers</i>. First semester 2014, 2015 & 2016• Physics 1013S - <i>Electromagnetism for Engineers</i>. Second semester 2014, 2015 & 2016	
Education	University of Cape Town PhD, Department of Astronomy, University of Cape Town, July 2017 <ul style="list-style-type: none">• Topic: <i>Peculiar Flow Fields in the Zone of Avoidance from the NIR Tully-Fisher relation</i>• Adviser: Prof. Renée C. Kraan-Korteweg M.Sc., National Astrophysics and Space Science Programme, December 2013 <ul style="list-style-type: none">• Topic: <i>The NIR isophotal Tully-Fisher relation and its cosmological applications in the Zone of Avoidance.</i>• Adviser: Prof. Renée C. Kraan-Korteweg B.Sc. (Honours), National Astrophysics and Space Science Programme, December 2011 <ul style="list-style-type: none">• Essay Topic: <i>Bulge and Disk Profiles of THINGS Galaxies.</i>• Adviser: Prof. Erwin de Blok	
Honors and Awards	<ul style="list-style-type: none">• 2017 winner of the Gruber Foundation and IAU Fellowship (50 000 USD)• Science Faculty PhD Fellowship at UCT, 2014 – 2016 (320 000 ZAR)• NRF Fellowship for M.Sc. at UCT, Jan 2012 – Dec 2013 (190 000 ZAR)• NRF Fellowship for Honours at UCT, Jan 2011 – Dec 2011 (95 000 ZAR)	

1st – Authored Publications

- [1] **Khaled Said**, Matthew Colless, Christina Magoulas, John R. Lucey, and Michael J. Hudson, “Joint analysis of 6dFGS and SDSS peculiar velocities for the growth rate of cosmic structure and tests of gravity”, *2019*
- [2] **Khaled Said**, Renée C. Kraan-Korteweg, and Lister Staveley-Smith, “The HI mass function in the Parkes HI Zone of Avoidance survey”, *2019 MNRAS*, **486**, 1796S
- [3] **Khaled Said**, Renée C. Kraan-Korteweg, T. H. Jarrett, Lister Staveley-Smith and Wendy L. Williams, “NIR Tully-Fisher in the Zone of Avoidance. – III. Deep NIR catalog of the HIZoA galaxies.”, *2016, MNRAS*, **462**, 3386
- [4] **Khaled Said**, Renée C. Kraan-Korteweg, Lister Staveley-Smith, Wendy L. Williams, T. H. Jarrett and Christopher M. Springob, “NIR Tully-Fisher in the Zone of Avoidance. – II. 21 cm HI-line spectra of southern ZOA galaxies.”, *2016, MNRAS*, **457**, 2366
- [5] **Khaled Said**, Renée C. Kraan-Korteweg and T. H. Jarrett, “On how to extend the NIR Tully Fisher relation to be truly all-sky,” *2015, MNRAS*, **447**, 1618
- [6] **Khaled Said**, Renée C. Kraan-Korteweg and T. H. Jarrett, “Galaxy peculiar velocities in the Zone of Avoidance,” *Proceedings of the 58th Annual Conference of the SA Institute of Physics, 8-12 July 2013. Durban, South Africa*,

Observing Proposals as PI

- **Khaled Said**, Renée Kraan-Korteweg, Thomas Jarrett, Lister Staveley-Smith, Christopher M. Springob and Wendy Williams, “Cosmic Flows in the Zone of Avoidance,” *ATNF Proposal*. **April** (2014) *Accepted*
- **Khaled Said**, Renée Kraan-Korteweg, Thomas Jarrett, Tom Mutabazi and Wendy Williams, “The NIR Tully-Fisher relation of galaxies in the Zone of Avoidance and resulting flow-fields,” *SAAO IRSF Telescope Proposal*. **April** (2013) *Accepted*

Selected Research Talks

- Cosmic Flows, Large-scale Structure & Visualisation, **Cape Town, South Africa**, 17 – 21 February 2020.
Talk: The growth rate of cosmic structure and tests of gravity.
- The Annual Scientific Meeting of the Astronomical Society of Australia (ASA), **Melbourne, Australia**, 25 – 29 June 2018.
Talk: The Taipan Peculiar Velocity Survey.
- Studying the Universe with GALaxy suRveys - Revealing the Unlimited in ShangHai (SUGAR-RUSH), **Shanghai, China**, 11 – 15 June 2018.
Talk: The Taipan galaxy survey.
- Cosmic Visions Dark Energy Workshop, **Berkeley, California, USA**, 14 – 15 November 2017.
Talk: The Taipan galaxy survey.
- The 3GC4 - HI Fidelity workshop, **Port Alfred, South Africa**, 24 October - 4 November 2016.
Talk: Peculiar velocity flow field in the Zone of Avoidance.
- Large Scale Structure and Galaxy Flows, **Quy Nhon, Vietnam**, 3 – 9 July 2016.
Talk: Peculiar velocity flow field in the Zone of Avoidance.
- The Infrared Survey Facility: Past and Future, **Cape Town, South Africa**, 2 – 4 March 2016.
Talk: Deep NIR catalogue of the HI Zone of Avoidance galaxies.

Selected Observing Experience

- **7** nights observing with the IRSF NIR telescope, SAAO, **Sutherland, South Africa**, April 2017 (Observer in charge K. Said)
- **9** nights observing with the IRSF NIR telescope, SAAO, **Sutherland, South Africa**, Feb-March 2015 (Observer in charge K. Said)

- **170** hours of remote observing with the Parkes radio telescope, ATNF, **Parkes, Australia**, April & May 2015 (Observer in charge K. Said)
- **160** hours of remote observing with the Parkes radio telescope, ATNF, **Parkes, Australia**, March & April 2014 (Observer in charge K. Said)
- **21** nights observing with the IRSF NIR telescope, SAAO, **Sutherland, South Africa**, April 2013 (Observer in charge K. Said)
- **60** hours observing with the Parkes radio telescope, ATNF, **Parkes, Australia**, March 2013 (Observer in charge K. Said)

References

Prof. Renée C. Kraan-Korteweg (e-mail: kraan@ast.uct.ac.za)

- Professor, Astronomy Department, University of Cape Town (UCT),
- ◊ Department of Astronomy, University of Cape Town, Private Bag X3, Rondebosch 7701, South Africa.

Prof. Matthew Colless (e-mail: matthew.colless@anu.edu.au)

- Director, Research School of Astronomy & Astrophysics,
- ◊ The Australian National University, Mt Stromlo Observatory, Cotter Rd, Weston Creek, ACT 2611, Australia

Prof. Lister Staveley-Smith (e-mail: lister.staveley-smith@uwa.edu.au)

- Professor, ICRAR, International Centre for Radio Astronomy Research
- ◊ ICRAR M468, The University of Western Australia, Crawley, Western Australia, 6009, Australia.

Prof. Tom Jarrett (e-mail: jarrett@ast.uct.ac.za)

- South African Research Chair in Astrophysics and Space Science, Astronomy Department, University of Cape Town (UCT),
- ◊ Department of Astronomy, University of Cape Town, Private Bag X3, Rondebosch 7701, South Africa.

Prof. Chris Blake (e-mail: cblake@swin.edu.au)

- Professor, Centre for Astrophysics and Supercomputing, Swinburne University of Technology
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