

Dr. Khaled Said

Contact Information	Postdoctoral Research Fellow School of Mathematics and Physics, The University Of Queensland St Lucia, Brisbane, QLD 4072, Australia	<i>Mobile:</i> +61 426 774 794 <i>E-mail:</i> k.saidahmedsoliman@uq.edu.au
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	<p>The University Of Queensland, St Lucia, Brisbane, QLD 4072, Australia</p> <ul style="list-style-type: none">• Postdoctoral Research Fellow with Prof. Tamara Davis. May 2020 – present <p>The Australian National University, Canberra ACT, Australia</p> <ul style="list-style-type: none">• The 2017 Gruber Foundation IAU Fellow• Taipan Postdoctoral Research Fellow with Prof. Matthew Colless. July 2017 – May 2020	
Teaching Appointments	<p>The University of Queensland, Brisbane, Australia</p> <ul style="list-style-type: none">• Invited lecturer: Frontiers in Astrophysics PHYS4080 - <i>Galaxy Surveys. BAO. Peculiar velocities. Correlation functions</i> Second Semester 2020 & 2021 <p>The Australian National University, Canberra ACT, Australia</p> <ul style="list-style-type: none">• Invited lecturer: Astronomy ASTR3002 - <i>Galaxies and Cosmology</i> Second Semester 2019 <p>University of Cape Town, Rondebosch, Cape Town, South Africa</p> <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	<p>University of Cape Town</p> <p>PhD, Department of Astronomy, University of Cape Town, July 2017</p> <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 <p>M.Sc., National Astrophysics and Space Science Programme, December 2013</p> <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 <p>B.Sc. (Honours), National Astrophysics and Space Science Programme, December 2011</p> <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

- 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”, *2020 MNRAS*, **497**, 1275S
- [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*,

Selected Research Talks

- “Cosmic Flows, Large-scale Structure & Visualisation, **Cape Town, South Africa**, 17 – 21 February 2020.
Invited 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.
Invited 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.
Invited Talk: The Taipan galaxy survey.
- Cosmic Visions Dark Energy Workshop, **Berkeley, California, USA**, 14 – 15 November 2017.
Invited Talk: The Taipan galaxy survey.
- The 3GC4 - HI Fidelity workshop, **Port Alfred, South Africa**, 24 October - 4 November 2016.
Invited Talk: Peculiar velocity flow field in the Zone of Avoidance.
- Large Scale Structure and Galaxy Flows, **Quy Nhon, Vietnam**, 3 – 9 July 2016.
Contribution 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.
Contribution Talk: Deep NIR catalogue of the HI Zone of Avoidance galaxies.

References

- Prof. Tamara Davis** (e-mail: tamarad@physics.uq.edu.au)
- ARC Laureate Fellow, **School of Mathematics and Physics**,
 - ◊ The University Of Queensland, St Lucia, Brisbane, QLD 4072, Australia

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. 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. 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.