

DR. RER. NAT. STHABILE KOLWA

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EMPLOYMENT

- 2021 - present** **Lecturer and Astronomer,**
The University of Johannesburg (UJ)
Gauteng, South Africa
- 2020** **Postdoctoral Research Fellow,**
Inter-University Institute for Data Intensive Astronomy (IDIA) at the University of Cape Town (UCT)
Remote
- 2016 - 2019** **Doctoral Student Researcher,**
The European Southern Observatory (ESO)
Garching bei München, Bayern, Deutschland
- 2013** **Astronomy Tutor,**
UCT, Western Cape, South Africa

EDUCATION

- 2016 - 2019** **Dr. rer. nat. (Doctor rerum naturalium) or Ph.D. in Physics, cum laude**
University: Ludwig-Maximilians-Universität München (LMU)
Research Institute: ESO
Thesis: *The kinematic nature of baryons in the multi-phase circumgalactic media of high-redshift radio galaxies*
Advisor: Dr. Carlos de Breuck, co-advisor: Dr. Joël Vernet
- 2014-2015** **M.Sc. in Physics, cum laude**
University of the Western Cape (UWC)
Thesis: *The Effects of Environment on radio-loud AGN Activity in Stripe 82*
Advisor: Prof. Dr. Matt J. Jarvis, co-advisor: Dr. Kim McAlpine
- 2010-2013** **B.Sc. Honours in Astronomy and Physics**
UCT
Thesis: *The Effects of Ionospheric Scintillation on the Dilution of Precision in GPS Positioning*
Advisor: Dr Pierre J. Cilliers

PUBLICATIONS

- Peer-reviewed:** *First authored:*
S. Kolwa, et al (2018), A&A, 625, 102
S. Kolwa, et al (2019), MNRAS, 482, 5156
- Co-authored:*
W. Wang, et al (2021), A&A, 654, 88
T. Falkendal, et al (2019), A&A, 621, 27
J. Vernet, et al (2017), A&A, 602, 6
M.J. Jarvis, et al (2016), PoS(MeerKAT2016)006
- Submitted:** **S. Kolwa**, et al (2021), A&A

COLLABORATIONS

- *Radio polarisation* working group led by R. Taylor (UCT/IDiA)
- *High-redshift radio galaxies* working group led by C. De Breuck (ESO)
- *Circumgalactic medium gas around galaxies* working group led by Céline Péroux (ESO/LAM Marseille)
- MeerKAT *MIGHTEE* (MeerKAT International GigaHertz Tiered Extragalactic Exploration) working group led by I. Whittam and C. Hale (Oxford)

INVITED TALKS

- University College London Astronomy Online Seminar (Oct 2021)
- The European Astronomical Society Virtual Meeting (Jun 2021)
- Southampton Astronomy Online Seminar (July 2021)
- SAAO Online Colloquium (May 2021)
- ETH Astrophysics Seminar, Zurich, Switzerland (Nov 2019)
- OPINAS (Optical Near Interpretive Astronomy) Seminar, Max Planck Institute for Extraterrestrial Physics (MPE), Garching, Germany (Nov 2019)
- *Modeling Meerkats* Workshop, Hazyview, Mpumalanga (July 2019)
- *Multi-messenger Astronomy with SKA precursors and pathfinders* Workshop, Aveiro, Portugal (May 2019)
- *Australia-ESO* Conference, Sydney, Australia (Feb 2019)
- *ESO Gas Matters* Seminar, Garching, Germany (Feb 2019)
- *Walking the Line* Meeting, Goldwater Centre, Arizona State University, USA (Mar 2018)
- *ESO AGN Club* Seminar, Garching, Germany (Feb 2018)
- *What Matters Around Galaxies* Conference, Durham University, United Kingdom (Jul 2017)
- *Dawn of Galaxies* Conference, Obergurgl, Austria (Jan 2017)
- *SKA Conference*, Cape Town, South Africa (Dec 2016)
- *SKA Conference*, Stellenbosch, South Africa (Dec 2015)
- *SKA Pathfinders and Radio Continuum Surveys (SPARCS)*, Hazyview, South Africa (July 2015)
- *SKA Conference*, Stellenbosch, South Africa (Dec 2014)

PROFESSIONAL ACTIVITIES

- Organiser in the *Astronomy in Colour* organisation
- Fundraiser for *Astro Molo Mhlaba* project (2019 - present)
- Volunteer at the *ESO Open Panel Committee* meetings for periods 109, 100 and 101 (2017-18)
- Organiser for monthly talks at the *ESO Wine & Cheese Seminar* series (2017-18)
- Co-ordinator for high-school Astronomy outreach (2015-16)
- SHAWCO, UCT tutor (2011 - 2014)

MEDIA & PRESS

- Scientific comments featured in *WIRED* magazine
[Link to the article](#)
- Featured in an ESO press release
[Link to article](#)
- Public talk on radio galaxies for the *SAAO Open Night* series
[Link to the video](#)
- Interview featured in *ESOCast* Episode 149
[Link to the episode](#)
- Popular science article published in the *Mail & Guardian* newspaper
[Link to the article](#)

REFERENCES

Prof Dr. Russ Taylor	Dr. Carlos de Breuck
Advisor & Project Lead	Ph.D. Advisor
Professor at UCT/IDiA	Senior Scientist at ESO
russ@idia.ac.za	cdebreuc@eso.org