

Sthabile Kolwa

Curriculum Vitae

Employment

- 2021-present** Lecturer and Post-doctoral Astronomer
The University of Johannesburg
- 2020** Post-doctoral Fellow
The University of Cape Town /
The Inter-University Institute for Data-Intensive Astronomy (IDIA)
- 2013** Astronomy Tutor
The University of Cape Town

Education

- 2016**
2019 **Dr. rer. nat. Physics**, Faculty of Physics, Ludwig Maximilian University of Munich (LMU), Munich, Germany,
Thesis: *The Effects of Environment on radio-loud AGN Activity in Stripe 82*
- 2014**
2015 **MSc Physics**, University of the Western Cape (UWC), Cape Town, South Africa
- 2010**
2013 **BSc Physics and Astronomy**, The University of Cape Town (UCT), Cape Town, South Africa

First-Authored Papers

- Kolwa, S.** ; Jarvis, M. J. ; McAlpine, K. ; Heywood, I. (2019), MNRAS, 482, 5156
- Kolwa, S.** ; Vernet, J. ; De Breuck, C. ; Villar-Martín, M. ; ... ; Man, A (2019), A&A, 625, 102

Co-authored Papers

- Hale, C. L. ; Whittam, I. H. ; Jarvis, M. J. ; ... **Kolwa, S.** ; ... Taylor, A. R. (2023), MNRAS, 520, 2668
- De Breuck, C. ; Lundgren, A. ; Emonts, B. ; **Kolwa, S.** ; Dannerbauer, H. ; Lehnert, M. (2022), A&A, 658, L2
- W. Wang, et al (2021), A&A, 654, 88
- Falkendal, T; De Breuck, C. ; Lehnert, M.D. ; ... **Kolwa, S.** ; Gullberg, B. ; Wylezalek, D. (2019), A&A, 621, 27

Vernet, J. ; Lehnert, M. D. ; De Breuck, C. ; ... **Kolwa, S.** ; ... Boulanger, F. (2017), A&A, 602, 6

Jarvis, M. ; Taylor, R. ; Agudo, I. ; ... **Kolwa, S.** ; ... ; Smith, D. J. B (2016) PoS(MeerKAT2016)006

Invited Talks and Scientific Contributions

- 2023 Space Telescope Institute Science Institute/Johns Hopkins University Journal Club Seminar (April 2023)
African Astronomical Society (AfAS) Meeting 2023 (Mar 2023)
- 2022 Brno High Energy Astrophysics Journal Club, Brno, Czech Republic (Nov 2022)
Max Planck Institute for Radio Astronomy (MPfIR) Colloquium, Bonn, Germany (Nov 2022)
BRICS Astronomy Working Group Seminar (virtual) (Oct 2022)
- 2021 University College London Astronomy Seminar (virtual) (Oct 2021)
The European Astronomical Society (EAS) Meeting (virtual) (June 2021)
Southampton Astronomy Online Seminar (July 2021)
South African Astronomical Society (SAAO) Colloquium (virtual) (May 2021)
- 2019 Astrophysics Seminar, ETH, Zurich, Switzerland (Nov 2019)
OPINAS (Optical Near Interpretive Astronomy) Seminar, Max Planck Institute for Extraterrestrial Physics (MPE), Garching, Germany (Nov 2019)
Modeling Meerkats Workshop (July 2019), Hazyview, Mpumalanga, South Africa
Multi-messenger Astronomy with SKA precursors and pathfinders Workshop (May 2019), Aveiro, Portugal
Australia-ESO Conference (Feb 2019), Sydney, Australia
ESO Gas Matters Seminar (Feb 2019), ESO Garching, Germany
- 2018 *Walking the Line Meeting* (Mar 2018), Goldwater Centre, Arizona State University, USA
ESO AGN Club Seminar (Feb 2018), ESO Garching, Germany
- 2017 *What Matters Around Galaxies?* Conference (Jul 2017), Durham University, United Kingdom
Dawn of Galaxies Conference (Jan 2017), Obergurgl, Austria
- 2016 *SKA Conference* (Dec 2016), Cape Town, South Africa
- 2015 *SKA Conference* (Dec 2015), Stellenbosch, South Africa
SKA Pathfinders and Radio Continuum Surveys (SPARCS) (July 2015), Hazyview, South Africa
SKA Conference (Dec 2014), Stellenbosch, South Africa

Teaching & Student Supervision

- 2021- *Engineering Physics for 2nd years*
- 2021- *Radiative Processes in Astrophysics*

- Students**
- Thando Mothogoane (supervision of PhD; 2022-)
 - Tshepang Siteo (co-supervision of MSc; 2022-)

Observing Experience

- 2017** ESO Period 100 observing on the Atacama Pathfinder Experiment Telescope (APEX), San Pedro de Atacama, Chile
- 2012** Optical observing on the Radcliffe 1.9-m Telescope at the South African Astronomical Observatory (SAAO), Sutherland, South Africa

Skills

Programming	Python, SQL, HTML5, Erlang
Computational tools	SciPy, NumPy, AstroPy & Pandas
Visualisation tools	Matplotlib, Seaborn, Plotly & Pillow
Development tools	Git & Docker
Documentation tools	Jupyter Notebook, L ^A T _E X & Microsoft Word

Professional Activities

- Member of the African Astronomical Society (AfAS) Executive Committee (2022 -)
- Chair of the AfAS early-career sub-committee (2022 -)
- 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)

Outreach

- Member of the *African Network for Women in Astronomy (AfNWA)* organisation
- Organiser in the *Astronomy in Colour (AiC)* collective
- Fundraiser for the *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 astronomy outreach at Elsie's Rivier High School (2015-16)
- Tutor for SHAWCO, UCT (2011-14)

Media & Press

- International Astronomy Union (IAU) *Women in Astronomy Working Group* Seminar (2022)
- Scientific comments featured in *WIRED* magazine (2021); Click here for a link to the article
- Session chair in the *AiC Speaker Series: Trailblazers* (2020); Click for a link to the video
- Public talk on radio galaxies for the *SAAO Open Night* series (2020); Click for a link to the video
- Popular science writer on *Medium* (2020-)
- Interview featured in *ESOCast* Episode 149: *Fast Track Your Career with the ESO Studentship Programmes* (2017); Click for a link to the episode
- Popular science article published *Mail & Guardian* (South Africa) titled *Power answer in black-holes?*; Click for a link to the article (2015)

Achievements

- 2023 Recipient of BAAP NRF funding
- 2016 - 2019 Awarded ESO Ph.D. Studentship funding
- 2016 Selected for the International Max Planck Research School (IMPRS), Astrophysics Ph.D. program
- 2011-2015 Recipient of NRF-SKA (National Research Foundation - Square Kilometer Array) B.Sc. and M.Sc. Scholarships

References

Prof Dr. Russ Taylor

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Dr. Carlos de Breuck

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The European Southern Observatory
Garching bei München, Germany
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Prof Dr. Matt Jarvis

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Dr. Jarita Holbrook

Cultural Astronomer
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Dr Michelle Cluver

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