Astronomy and Astrophysics at UNISA

Lerothodi L. Leeuw
UNISA, College of Graduate Studies
(in conjunction with the Department of Astronomy)
UNISA

- Largest Distance Learning University in SA, 140 years old
- Based in Pretoria, with national plus international satellite campuses
- CSET (Department of Astronomy) moving to Florida Campus in Johannesburg
- Unisa has >320k students, ~8% are postgraduates
- Like SA goals, looking to grow research capacity
- “African University with service to humanity”
- Famous Alumni (N. Mandela, C. Ramaphosa, VCs ... )
Astronomy at UNISA

• The UNISA Observatory (20 years old)
  – 14 inch optical telescope in a steerable dome,
  – CCD, Photometer, Spectrometer
  – For teaching (undergraduate + postgraduates) plus Outreach
  – Collaborations with other Universities possible (e.g. UP years ago)
  – I plan to include Teaching Radio Dishes Here + (2 PEDs?)

• UNISA undergraduate astronomy tuition
  – Degree being phased out, but courses are on-going and short certificate courses possible

• UNISA postgraduate astronomy tuition - ongoing
• UNISA postdoctoral fellows - growing
Astronomers at UNISA

• Prof. Lerothodi L. Leeuw + graduate students, College of Graduate Studies
  – Observational Extragalactic Astronomy using multi-wavelength telescopes around the world
  – Early-type galaxies and their progenitors
  – Interdisciplinary work (physics, education, social, ...)
• Prof. Derck Smits + graduate students, Department of Astronomy
  – Stellar Astronomy and Masers at radio / optical

More senior and junior staff positions possible .... including Unisa or jointly funded postdocs ....
Possible Role in Astronomy Growth

- Distance Learning + Online Facilities + Video Conferencing + Seminar Facilities + Post graduate Centre + Extensive Library + the UNISA Observatory + New Radio facilities
- Supportive management
  - e.g. astronomy dedicated session during research week
  - already had one of the SALT astronomers visiting + HartRAO
- NASSP (-N) ... very open ...
- SKA Africa + partner countries
- Research
  - Collaborations + Joint supervision
  - Large projects, e.g. New MeerKAT (key) project etc ...
UNISA Observatory (20 yrs old)