



Contribution ID: 34

Type: **Talk**

Data Intensive Time-Domain Astronomy with MeerKAT and the SKA

Tuesday, 1 December 2020 12:15 (30 minutes)

In July 2018, MeerKAT started its science mission. One of the 5-year legacy programs on MeerKAT is the ThunderKAT large survey project which aims to understand the astrophysical processes in stellar explosions and other energetic outbursts in the sky. In these objects, dramatic changes can occur on very short time scales. In this talk, I will highlight the data challenges of data intensive time-domain radio astronomy. I will give some examples of our experience over the last two years in the rapid analysis and astrophysical interpretation of large MeerKAT data sets on the Ilifu research cloud. As a global collaborative research project involving around 100 researchers, including many postgraduate students from South Africa and African SKA partner countries, the Ilifu research cloud is an invaluable resource to bring the researchers to the MeerKAT research data. I will highlight some of the lessons learned so far, and will look ahead towards the SKA.

Student?

No

Supervisor name

Supervisor email

Primary author: Prof. WOUDT, Patrick (University of Cape Town)

Presenter: Prof. WOUDT, Patrick (University of Cape Town)

Session Classification: DIRISA

Track Classification: DIRISA