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## **KEYNOTE 5: The MeerKAT Science Data Processing Journey**

*Wednesday, 5 December 2018 09:00 (45 minutes)*

On the 13th July 2018 the Deputy President of the Republic of South Africa, David Mabuza, unveiled the MeerKAT telescope array.

The MeerKAT telescope is a mid-frequency 64-antenna array radio telescope. The MeerKAT telescope generates a large amount of data. The Science Data Processing subsystem is responsible for ingesting the telescope data, cleaning the data, packaging that data for scientific analysis, delivering that data to science groups, and storing that data for future use.

In order to achieve these objectives, the Science Data Processing team has had to innovate in how to build the appropriate high performance computer systems to meet MeerKAT telescope performance and capacity requirements. Project constraints included budget, human resources, technology availability, and problem novelty.

Khutso Ngoasheng will narrate the audience through the journey to delivering the MeerKAT telescope's Science Data Processor. He will talk briefly about current activities and challenges within the Science Data Processing subsystem. He will also introduce potential future paths for the Science Data Processor, especially in the Square Kilometre context.

### **Presenter Biography**

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**Session Classification:** KEYNOTE 4: Mr Khutso Ngoasheng, SARAO