## 2018 CHPC National Conference



Contribution ID: 167 Type: Talk (invited)

## Introducing the Square Kilometer Array (SKA) Mid Data Centre Facility

Tuesday, 4 December 2018 11:30 (30 minutes)

As part of hosting the Square Kilometer Array (SKA) mid frequency radio telescope in the Northern Cape Karoo region, the South Africa Radio Astronomy Observatory (SARAO) will be providing suitable facilities to house the computing, networking and data storage for both the Science Data Processor (SDP) and an SKA Regional Science Centre (SRC). These two facilities are expected to host petascale computing, exascale storage capacity and network connectivity in order of 8 Tbps by 2024. The facilities are expected to be located in Cape Town, over 700 kms from the Central Signal Processor (CSP) at the Telescope core site near the town of Carnarvon.

The purpose of this presentation is to share the latest information that will be used to define requirements for the construction of the two co-located facilities, each with their own governance models, operation models and potentially unique approaches to fulfilling the computing infrastructure requirements.

Currently SARAO is working together with the SKA Organisation (SKAO), the Department of Science and Technology (DST) South Africa and the Western Cape Government (WCG) on initial plans and aims to start to journey of engaging with other stakeholders, gathering information and improving accuracy of detailed information with the aim to assist with the planning that will ultimately lead to construction of the required facilities.

## **Presenter Biography**

Primary author: Mr MAIN, Jeremy (SARAO / SKA South Africa)

Presenter: Mr MAIN, Jeremy (SARAO / SKA South Africa)

Session Classification: HPC Technologies

Track Classification: HPC Technology