## Centre for High Performance Computing 2024 National Conference



Contribution ID: 141 Type: Invited Talk

## Cosmology with radio telescopes: finding a needle in the datastack

Tuesday, 3 December 2024 13:50 (20 minutes)

High performance computing (HPC) has been a crucial factor in the development of cosmology in the past few years. The tension between increasing precision and computing limitations drives a lot of our research work in the development of new algorithms. I will review the research done by my group in the context of HPC focusing on 3 main topics: 1) large scale simulations of the early Universe; 2) model fitting and 3) data processing, in particular with the radio telescopes installed in South Africa. I will conclude with an outlook of the future HPC needs for observational cosmology in South Africa.

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Student or Postdoc?
Email address
Co-Authors
CHPC User
CHPC Research Programme
Workshop Duration

**Primary author:** Prof. SANTOS\*, Mario (University of the Western Cape)

**Presenter:** Prof. SANTOS\*, Mario (University of the Western Cape)

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