

STATUS OF THE SQUARE KILOMETRE ARRAY

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Abstract

The Square Kilometre Array (SKA) is a global project to build a number of multi-purpose radio telescopes, operating as a single observatory, that will play a major role in answering key questions in modern astrophysics and cosmology. It will be one of a small number of cornerstone observatories around the world that will provide astrophysicists and cosmologists with a transformational view of the Universe. Two major goals of the SKA is to study the history and role of neutral Hydrogen in the Universe from the dark ages to the present-day, and to employ pulsars as probes of fundamental physics. Since 2008, the global radio astronomy community has been engaged in the development of the SKA and is now nearing the end of the *Pre-Construction* phase. This talk provides an overview of the current status of the SKA and the plans for construction, focusing on the computing and software aspects of the project.

REFERENCES

INTRODUCTION

The Square Kilometre Array (SKA) is a global project that has the aim of building at multi-purposes radio telescopes, with an equivalent collecting area of at least one square kilometre, so that key questions in modern astrophysics and cosmology can be answered. The science cases that the SKA telescopes are supposed to enable have been published in [1].

BASELINE DESIGN

[2] defines the baseline design capabilities of the SKA.

CONCLUSION

Any conclusions should be in a separate section directly preceding the **ACKNOWLEDGEMENT**, **APPENDIX**, or **REFERENCES** sections, in that order.

ACKNOWLEDGEMENT

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APPENDIX

Any appendix should be in a separate section directly preceding the **REFERENCES** section. If there is no **REFERENCES** section, this should be the last section of the paper.

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- [1] *Advancing Astrophysics with the Square Kilometre Array*, SKA Organisation, Apr. 2015.
- [2] P. Dewdney, “SKA1 System Baseline Design v2,” SKA Organisation, Design Report SKA-TEL-SKO-0000002, Rev 03, Feb. 2016.