

# Unlocking the Secrets of the Universe with the SKA

*Monday, 1 September 2025 18:00 (1 hour)*

The SKA is set to become the largest and most powerful radio telescope on Earth, with one part being built in Western Australia and the other in South Africa. When complete, it will let us explore the Universe in more detail than ever before—listening to cosmic signals across vast distances and times.

In this talk, we'll take a journey through the incredible science the SKA will make possible: from mapping the birth of the first galaxies and probing the mysteries of black holes, to detecting the faint whispers of pulsars and using them to test Einstein's theories. We'll see how it will help answer big questions about our cosmic origins, the nature of dark matter, and even whether life exists beyond Earth.

We will also explore how the SKA is being built and commissioned right now, with engineers and scientists carefully testing and integrating its thousands of antennas to bring this extraordinary telescope online. You'll get a behind-the-scenes look at how this global scientific instrument is coming to life, step by step.

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**Session Classification:** Public Lecture