

The science impact of high sensitivity VLBI with SKA

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The Square Kilometre Array (SKA), reaching a collecting area of one square kilometre, will be the world's largest radio telescope. Result of a scientific collaboration between 10 countries (with more to join), it will consist of one Observatory with 2 telescopes located in different continents, Africa and Australia. The telescopes deployment is planned in two phases, but even in its first stage (SKA1) it will already enable transformational science in a broad range of scientific objectives. In particular for VLBI science it will contribute with a very sensitive element with access to the Southern Hemisphere. It will also drive technological advances for the future VLBI era, such as the inclusion of multi-beam radio telescopes in VLBI networks, and it will bring opportunities to modernise the VLBI global operational model. This contribution gives an update of the current status and timeline of the project, presently undergoing the Critical Design Reviews for the different components of the SKA1 Observatory.