

**[초IT-01] The Square Kilometre Array in Australia**

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The Square Kilometre Array (SKA) will be the world's largest and most sensitive radio telescope. It will address a wide range of fundamental questions in physics, astrophysics, cosmology and astrobiology. Australia, one of the two countries selected to host the SKA, has spent several years preparing by opening up the Murchison Radio-astronomy Observatory (MRO) as a uniquely radio quiet site in Western Australia, and by constructing the world's most powerful radio survey telescope, the Australian SKA Pathfinder (ASKAP).

The SKA will be built in two phases. Phase I will include ASKAP, which will use novel phased-array feeds and grow to become "SKA-survey". Phase I will also include a dish array ("SKA-mid") in South Africa and a low-frequency array ("SKA-low") in Australia, and is slated for operation from about 2020. Phase II of the SKA will consist of further expansion of SKA-low and SKA-mid and is due for completion in the middle of the next decade.