

Raman Research Institute in mission to explore formation of early stars

Our Bureau
Bangalore, Aug. 19:

Bangalore headquartered Raman Research Institute (RRI) has helped build the Murchison Widefield Array (MWA), a radio telescope in the Australian Outback, to explore the formation of early stars and galaxies almost 13 billion years ago.

According to a press release, RRI, along with partners in Australia, the US and New Zealand, built the telescope in the remote Australian Outback, over 200 km from Western Australian coast in Murchison district.

Digital receivers of the MWA were built at RRI, which according to Director of the RRI Ravi Subrahmanyam, will help humanity take the first exploratory steps into times in our cosmic history that have remained inaccessible to date.

“It will enable astronomers to glean insights into our own Milky Way and galaxies beyond, pulsing and exploding stellar objects, and the influence of the Sun on inter-planetary space weather close to the Earth,” he added.

The MWA will perform several surveys of the entire Southern sky and make extremely sensitive images of targeted regions with data that can provide astronomers insights into evolution experienced by the primordial cosmic gas as the first stars and galaxies formed in the early universe, structure of the gas in the Milky Way and its magnetic field and the science of space weather that connects our Sun to the environment near Earth.

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