

The SKA radio telescope probes on dark matter beyond WIMP

Tuesday, 20 August 2024 11:00 (30 minutes)

We explore the sensitivity of the radio telescope to the light dark matter such as sub-GeV dark matter and axion-like particles. We specifically analyze the impact of these light dark matter candidates on the formation of large-scale structures and the resultant 21 cm radio signals that the SKA is poised to detect. We will also discuss the complementarity of these forthcoming radio signal bounds with current experimental constraints from other investigations, highlighting the synergistic potential of multi-messenger astronomy in understanding dark matter.

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Session Classification: Plenary talks (1)