



Saturday 9 July, 09:00 – 09:20

Session 17: Neutrinos as probes of the universe

Review of indirect detection of dark matter with neutrinos

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Dark Matter could be detected indirectly through the observation of neutrinos produced in dark matter self-annihilations or decays. Searches for such neutrino signals have resulted in stringent constraints on the dark matter self-annihilation cross section and the scattering cross section with matter. In recent years these searches have made significant progress in sensitivity through new search methodologies, new detection channels, and through the availability of rich datasets from neutrino telescopes and detectors, like IceCube, ANTARES, Super-Kamiokande, etc. I will review recent experimental results and put them in context with respect to other direct and indirect dark matter searches. I will also discuss prospects for discoveries at current and next generation neutrino detectors.