CIPANP 2018 - Thirteenth Conference on the Intersections of Particle and Nuclear Physics

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keV Sterile Neutrinos as Dark Matter and the 3.5 keV Line

Thursday, 31 May 2018 15:20 (20 minutes)

I will give an overview of the status of keV sterile neutrinos as dark matter, including the production mechanisms in the early universe and detectability today. I will give the status of indirect searches, including the candidate X-ray line at 3.55 keV and prospects for future searches. I will also discuss laboratory detection methods, including searches in beta decay and K-capture nuclei.

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