

Journal Club- session: 25. Nov. 2019 16:30

Have a look at the following publications about relic neutrino detection:

How difficult it would be to detect cosmic neutrino background?

Cite as: AIP Conference Proceedings 1666, 140003 (2015); <https://doi.org/10.1063/1.4915587>
Published Online: 15 July 2015

Petr Vogel

(download on indico)

and at **PTOLEMY: A Proposal for Thermal Relic Detection of Massive Neutrinos and Directional Detection of MeV Dark Matter**,
arXiv: 1808.01892

- What is the expected neutrino freeze out temperature? How and why does it differ from the naively calculated one? What is the neutrino energy nowadays?
- Why is neutrino capture on unstable nuclei deemed more promising than coherent neutrino scattering?
- What are the expected event rates? What are the uncertainties?
- What are the biggest challenges in building an experiment like PTOLEMY?