16th Patras Workshop on Axions, WIMPs and WISPs







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Search for sterile keV neutrinos

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Sterile neutrinos appear in minimal extensions of the Standard Model of particle physics. If their mass is in the keV regime, they are viable dark matter candidates. In this talk both indirect astrophysical and cosmological limits and new ideas for laboratory-based searches will be presented. Special focus will be put on a possible future upgrade of the KATRIN experiment with a novel multi-pixel detector system, which would allow to search for the characteristic signature of sterile neutrinos in tritium beta decay.

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