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## Relic neutrino decay solution to the excess radio background mystery

*Thursday, 20 June 2024 11:00 (30 minutes)*

I will first discuss why the excess radio background measured by the balloon borne experiments ARCADE 2 is a mystery and might be an indication of new physics. After having reviewed a few solutions that have been proposed and that are now ruled out I will focus on the possibility that the excess is explained by radiative decays of relic neutrinos, showing how they produce a very nice fit to the data. I will then talk about possible models of neutrino decays able to produced such a solution. I will finally comment on possible links of such a solution with other cosmological anomalies and tensions.

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