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Low-Energy Supernovae Bounds on Sterile Neutrinos

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Sterile neutrinos can be produced through mixing with active neutrinos in the hot and dense core of a collapsing supernova (SN). The standard SN bounds on the active-sterile mixing (θ) arise from the SN1987A energy-loss argument. In this talk, I will discuss a novel and stringent bound on θ arising from the energy deposition through the decays of sterile neutrinos inside the SN envelope.

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