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The neutrino self-energy in a magnetized medium

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Abstract content

In this talk we present the neutrino self-energy in presence of a magnetized medium. The magnetized medium consists of electrons, positrons, neutrinos, nucleons and a uniform classical magnetic field. Our calculation is specifically suited for situations where the background plasma may be such that the number of particles is equal to the number of antiparticles. The calculation is relevant in various astrophysical scenarios and the physics of the early universe.

Summary

The neutrino self-energy is calculated in a magnetised medium, and its applications to possible cosmological and astrophysical settings are discussed.

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