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Neutrino oscillations in moving and accelerating matter

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Neutrino flavor oscillations in matter moving with a constant speed and in matter moving with acceleration are considered. The corresponding generalizations of the Mikheyev-Smirnov-Wolfenstein resonance condition is evaluated. The results are of interest for astrophysical applications. In particular, it is shown that the matter motion and acceleration significantly contribute to the neutrino flavor oscillations pattern in supernovae.

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