Influence of strong magnetic field on neutrino heating of supernova shock wave

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All significant processes of shock wave heating by neutrinos are investigated in the framework of the magnetorotational model of a core collapse supernova. Since the neutrino heating can increase the efficiency of supernova explosion, these processes can be taken into account in simulations of supernova explosions. It is shown that even in the presence of a strong magnetic field in the region, where the shock wave is formed, the heating rate is mainly determined by the neutrino absorption and emission in direct URCA processes. The main conclusion is that the influence of the magnetic field on these processes can be neglected.