

Neutrino losses in a giant flare from SGR

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Neutrino losses in a giant flare from SGR are investigated. The emissivity in dominant neutrino processes is calculated. Two cases are considered: a hot electron-positron plasma (the magnetar model), and a plasma with baryon contamination. The limitations on magnetic field strength from neutrino cooling rates are discussed. It is shown, that in the framework of the magnetar model, a moderate neutrino cooling requires a magnetic field strength that is one order of magnitude greater than that assumed in magnetars. Therefore, some baryon contamination in a giant flare of a SGR is necessary.