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## **The double Compton process in a strongly magnetized plasma**

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The process of double Compton scattering,  $e\gamma \rightarrow e\gamma\gamma$ , in strongly magnetized charge-asymmetric, cold electron plasma is considered. The amplitude of the process is obtained and selection rules for photon polarizations are found. It is shown that in such a plasma the process of double Compton scattering will be efficient mechanism for the production of polarized photons. As a result, it could lead to the modification in the mechanism of the spectra formation of SGR and AXP.

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