Seventeenth Marcel Grossmann Meeting



Contribution ID: 43

Type: Talk in a parallel session

Schwinger process in hot electrospheres of strange stars

Thursday, 11 July 2024 16:00 (20 minutes)

We present a series of numerical simulations of the pair creation process in the electrosphere of strange star using the Vlasov–Maxwell equations. The mechanism of pair creation in the electrosphere of compact objects is revisited, paying attention to evaporation of electrons and acceleration of electrons and positrons, which were previously not addressed in the literature.

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Session Classification: Absolute stability of strange quark matter: from dark matter to stellar evolu-

tion

Track Classification: Compact Objects and Stellar Evolution (CO): Absolute stability of strange quark matter: from dark matter to stellar evolution