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**A Study of Generalized Second Law of Thermodynamics in
Magnetic Universe in the light of Non-Linear Electrodynamics**

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In this work, we have considered the magnetic universe in non-linear electrodynamics. The Einstein's field equations for non-flat FRW model have been considered when the universe is filled with the matter and magnetic field only. We have discussed the validity of the generalized second law of thermodynamics of the magnetic universe bounded by Hubble, apparent, particle and event horizons using Gibb's law and the first law of thermodynamics for interacting and non-interacting scenarios. It has been shown that the GSL is always satisfied for Hubble, apparent and particle horizons but for event horizon, the GSL is violated initially and satisfied at late stage of the universe.