Magnetohydrodynamics in the Elsasser variables: Quantum-field renormalization group approach

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We study a stochastic magnetohydrodynamics process define by the Elssaser variable. The process is rewritten to the quantum field model using the Martin-Siggia-Rose formalismus. We proceed by using the renormalization group approach to study infrared scale behavior. The investigation is performed in the leading order of perturabation theory and the stable infrared fixed points, the area of stability are determined. Finally, the scaling behavior of physically interesting correlation function in the inertial range interval will be presented.