

Abstract Submitted
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Non-dimensionalization of Helmholtz equation and the nature of the Alfvénic turbulence AHMAD REZA ESTAKHR, Independent — I redefined Reynold number in a different situation, the Helmholtz equation which represents the time-independent wave equation, $\nabla^2 A + k^2 A = 0$ Now i consider wave number as Reynold number per linear dimension, $L^2 \nabla^2 A + R_e^2 A = 0$ the important non-dimensional parameters for MHD are Reynold, Magnetic Reynold and Prandtl numbers, $R_e \cdot P_m = R_{em}$ then we find, $P_m^2 L^2 \nabla^2 A + R_{em}^2 A = 0$ where the ∇^2 is laplacian and A is the Amplitude.

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