



Dynamo Theory and Numerical Modeling in Geosciences: Some New Theoretical and Numerical Aspects

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In this paper an enhanced JSM global asymptotic theory is considered for solving some marginal turbulence magnetic (originated) eddy problems. Such eddies are a consequence of dynamo action in the interiors of cosmic bodies. Same problems are attacked by some new and developed numerical approximations. We shall introduce some theoretical and numerical variational inequalities aspects for modeling and solution regime. Thereafter theoretical and numerical results validate each other.

Key Words: JSM theory, variational inequalities, marginal turbulence