



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2014_PSIJ_10134
Title of the Manuscript:	Magneto-thermal Instability of Rotating Partially Ionized Hall Plasma Flowing Through Porous Medium
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The dynamical stability of an infinite homogeneous collision dominated gas was first investigated by Jeans and subsequently the issue was taken up by many authors for a wide variety of astrophysical and cosmological systems. Jeans instability criterion plays a crucial role towards our theoretical understanding of many astrophysical and cosmological processes. The current work provides a generalization of the Jeans paradigm where the authors have incorporated various (de)stabilizing parameters and investigated the role of some specific set of parameters on the MHD stability of a two-fluid self-gravitating plasma. By adopting a linear perturbative approach, the authors have established the dispersion relation and investigated the impacts of various factors such as neutral-ion collision frequency, rotation and other dissipative processes on the magneto-thermal stability of a partially ionized homogeneous plasma. The mathematical treatment of the paper appears to be correct. However, the authors may consider incorporating the following issues in their analysis:</p> <p>(1) The authors should discuss under what circumstances the assumptions made in section 2 are justified.</p> <p>(2) The authors should discuss relative strengths of the (de)stabilizing free parameters.</p> <p>(3) The authors have considered two limiting cases (parallel and perpendicular) for the propagation of</p>	



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	<p>waves to the magnetic field. What happens when the propagation is oblique?</p> <p>(4) The references should be updated.</p> <p>(2) A substantial language editing is required.</p> <p>To summarize, the paper in its present form cannot be accepted for publication. I would suggest the authors to address the above mentioned issues and submit a revised manuscript.</p>	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		

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