

Review Form 1.6

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| Journal Name: | International Astronomy and Astrophysics Research Journal |
| Manuscript Number: | Ms_IAARJ_94075 |
| Title of the Manuscript: | The significance of Shear Stress in Cosmology |
| 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:

(<https://www.journalspsij.com/index.php/PSIJ/editorial-policy>)

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) |
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| Compulsory REVISION comments | | |
| Minor REVISION comments | | |
| Optional/General comments | <p>The concept of shear stress forms a fundamental base for meteorology and oceanography, which is the heritage of classical physics. In this brief note, the authors show by well understood physical reasoning that it is also fundamental to cosmology although this link has not been previously recognized. The key physical model is that of the sea surface where two fluids (air and water) of high density contrast interact giving rise to a constant shear stress layer and wave breaking. In cosmology, we show that two analogous, equal and opposite stress layers, due respectively to the formation of galaxies on the large scale and to their destruction by black holes on the small scale, constitute the physical model for the Universe, in which the mean shear stress is zero. The consequences of this model for the expanding Universe are presented. Two comparative images are also shown which illustrate the similarity between stress fields observed in a laboratory experiment and in the cosmos.</p> <p>The manuscript is clear, concise, reasonably self-contained presentation of the material and Figs. are clear, giving adequate reference to related work, the title is appropriate and the abstract is adequate for verbatim reproduction in abstract journals. This work is good.</p> <p>So I recommended this work to publish in International Astronomy and Astrophysics Research Journal.</p> | |

PART 2:

| | 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) |
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| Are there ethical issues in this manuscript? | <i>(If yes, Kindly please write down the ethical issues here in details)</i> | |

Reviewer Details:

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|----------------------------------|---------------------------------|
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| Department, University & Country | Egypt |