



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_24990
Title of the Manuscript:	Kaluza-Klein Bouncing Cosmological Model in General Relativity
Type of the 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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> REVISION comments	The authors study bouncing cosmological solutions for Kaluza-Klein space-time within the general relativity framework. They specify the 5D metric and all the conditions needed to solve the field equations and to obtain the cosmological quantities of interest. There are some issues with the presentation. Motivations, goals and methodology are not well exposed. The original part of the manuscript must be emphasized more. I could suggest to the authors to highlight the connection between the early and late time acceleration that is only mentioned in the final discussion. Despite the analytical results, this is an important point that need a further discussion. Moreover, nothing is said about the stability of their solutions. Finally, the plots are completely unreadable. – Proofreading is needed. – References needs to be inserted when author use known results. – Eq. (15), that allow the author to solve the field equation, should be further discussed (not only mentioning the reference) – Plots can not be seen in the current format. Authors should increase the size and resolution of the plots. Moreover, authors should put the right variables on the axis.	



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<u>Minor</u> REVISION comments	– Update references: some references have been published. Therefore, instead of writing the DOI code (or just the arxiv cose) it would better if authors supply the journal reference. – In the introduction, authors list a series of previous works about bouncing cosmological models in modified gravity, as well as for Kaluza-Klein model. However, it is slightly obscure the aim of the paper. I invite the authors to further clarify the aim of their work with few sentences indicating the possible importance of constructing Kaluza-Klein bouncing cosmological model. - In eq. (1), it would be better to replace A and B with A(t) and B(t). - In order avoid misunderstandings for the reader, the authors should use Greek sub-indices to indicate tensor or vector with 4 components (space and time) while Latin ones for spatial vector, as customary. Or, in alternative, they should indicate in the text that Latin indices vary from 0 to 4. – Section 2: The theoretical framework should be explained in more details. – Section 3: The plots and results should be explained in more details. Authors should better organize that section since it appear just as a list of results. – Author must highlight which are the novel results of their paper and their importance. They should explain if the early-time bouncing solution is stable, and mention what they expect (for this model) at late time. In other word: How do authors explain the late time acceleration in the framework of this model (if they can)? Despite the fact that the author illustrate a new solution: why are these results important?	
<u>Optional/General</u> comments		

Reviewer Details:

Name:	Anonymous
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