



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2015_PSIJ_18515
Title of the Manuscript:	Bianchi Type-IX Cosmological Model in $f(R)$ Theory of Gravity
Type of the Article	Create a different gravitational model

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>)



SDI Review Form 1.6

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)
<u>Compulsory</u> REVISION comments	The English grammar (spelling) is bad and needs an edit especially in the abstract. The last half of the abstract covers an equation... This should be in the text. The author should stress the importance of this effort and what is the direction or impact that this will make... In other words, what is the bottom-line and why should someone read the rest of the paper... I will look forward to the author's description of the Bianchi Type-IX space-time and what happened to the other previous efforts. I would have appreciated some comments for the different types mentioned. However, the references are more than adequate and it is clearly assumed that 'players' in this field fully understand the material... I would have appreciated more words before equation 1 is provided and was this the same starting point for the other 'types' previously mentioned? In equation 5, what is the impact of sine and cosine in a Cartesian coordinate system for the metric? In the use of equation 2 up to 11, $F = df/dR$. These derivatives are not two order differentiation but actually three. Will this change the solution? From eq. 18 to 22, f disappears? It should be the derivative of	



SDI Review Form 1.6

	between eq 2 and 3. The problems with sine and cosine of the Cartesian coordinates is, to me troublesome. This definitely will impact the results strongly. What is this impact in eq. 5? End of section 5--- specify gamma. What happens if m and n are not equal to 2? Does this result asymptotically satisfy Newton's gravitation? I don't think so? What about Jefimenko's model where gravity is a function of distance and velocity? To some degree, you are implying the same point. What is the consequence of this value as well as others? I would suggest the author recheck the arithmetic in terms of results and signs for credibility. Fix the abstract to make a stronger point. The introduction should tell more about the story. Results need some more comparisons or words...	
<u>Minor</u> REVISION comments	See other comments... Will this model create gravity waves?	
<u>Optional/General</u> comments		

Reviewer Details:

Name:	P. A. Murad
Department, University & Country	Obukhov Institute of Atmospheric Physics of RAS, Moscow, Russia