SCIENCEDOMAIN *international*
www.sciencedomain.org

SDI Review Form 1.6

Journal Name:	**Physical Science International Journal**
Manuscript Number:	**Ms_PSIJ_48386**
Title of the Manuscript:	**A First Approach to Loop Quantum Gravity in the Momentum Representation**
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)

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	Transitions from the configuration space to the momentum one are considered within the standard Dirac's Hamiltonian formalism. First the authors consider just non-relativistic quantum mechanics. Surface terms are taken into account. The authors derive Eq.(12) which is called the "central equation of this paper". The equation by itself is certainly extremely simple and doesn't add anything new. Moreover, it is actually not used in the most interesting part of the paper devoted to the Loop Quantum Gravity (LQG). The actual main result of the paper is just the transition to momentum space in the LQG equations of motion at the classical level. The authors accurately say that the presented study is just the first step. Nevertheless, the authors should clarify how the transition to the momentum space can help in treatment of Loop Quantum Gravity? What is the principal difference with respect to the standard approach? Especially this is questionable if surface terms are omitted. In general, he paper doesn't add much to the field. But I do not see major problems in the approach itself. So, I would not object publication of the paper upon clarification of the advantages of the transition into the momentum space.	
Minor REVISION comments		
Optional/General comments		

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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

Name:	***Andrej B. Arbuzov Bogoliubov***
Department, University & Country	***Joint Institute for Nuclear Research, Russia***