



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_31669
Title of the Manuscript:	Computer Modeling of Properties of Superparticles with the Help of Experimental Data Run I at the LHC
Type of the Article	Original research paper

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 (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		
Minor REVISION comments	<p>1) I suggest the following title: Computer Modelling of Properties of Superparticles</p> <p>2) I suggest the following abstract: In this paper, we have studied the properties of superparticles within Constrained Minimal Supersymmetric Standard Model (CMSSM) using experimental data obtained at the LHC. The first run of the LHC made it possible the selection of experimental data for purposeful SUSY searches at energies of 13 TeV. Measurements of masses of Higgs boson and top quark, which led to a conclusion about instability of electroweak vacuum, searches for missing transverse energy and charged superparticles, the mass of Higgs boson predicted by SUSY model are good indicators for determining of the four SUSY searches scenarios. Within CMSSM model with the help of computer programs SDECAY and PYTHIA 8.2 were calculated masses, decay widths, cross section for production of superparticles at the center of mass energy of 13 TeV and 33 TeV. The obtained results allow to conclude about the increasing of the production cross section of the superparticles at higher energies and provide the prediction of the most important decay channels of light superparticles. These results are relevant for further SUSY searches at the LHC.</p> <p>3) I suggest the following keywords: Superparticles;</p>	<p>1) The title is changed</p> <p>2) The abstract is changed</p> <p>3) The keywords are changed</p>



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	Constrained Minimal Supersymmetric Standard Model; Higgs boson; electroweak vacuum; production cross section	
<u>Optional/General</u> comments		