



**SDI Review Form 1.6**

**PART 1:**

Journal Name:	<b><u>Physical Review &amp; Research International</u></b>
Manuscript Number:	<b>2013_PRR1_4043</b>
Title of the Manuscript:	<b>A Fast and Simple Algorithm for Detecting Large Scale Structures</b>
Type of the Article	<b>Case study</b>

**General guideline for Peer Review process is available in this link:**

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

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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### **PART 2: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <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>
<b><u>Compulsory</u></b> REVISION comments		
<b><u>Minor</u></b> REVISION comments	<p>This paper develops a gravitational potential method (GPM) to find superstructures from large datasets (e.g., SDSS), and shows its reliability in the detection of superclusters using a cluster sample extracted from the GMBCG cluster catalog. It thus should be a worthy contribution to PRRI. I don't think there is anything wrong with the algorithm, but I have a serious concern about the paper in its present form that needs to be addressed prior to publication, however.</p> <p>The GPM is applied to cluster samples rather than galaxy samples. As far as I know, there are several large cluster catalogues, i.e., AMF (Szabo et al. 2011), GMBCG, and WHL09/WHL12 constructed from the SDSS using different algorithms. However, the matched rates of identified clusters are at the levels of 30%-40% among each other. One would expect that the detected superstructures by this method are likely to be significantly different for different cluster catalogues.</p>	I agree with your criticisms. I added a comparison with the WHL12 in Sect. 3.7.1 and some specifications have been added at the end of Sect.2, Sect.3.1 and Sect.3.8



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	<p>I am open to changing my mind if the author can convince me that the GPM is really an efficient algorithm for detecting large-scale structures from large galaxy datasets, without strongly dependence on the known cluster samples. Otherwise, I would suggest the author clarify my concern and tone down related words in the text.</p>	
<b><u>Optional/General</u></b> comments		