



**SDI Review Form 1.6**

**PART 1:**

Journal Name:	<b><u>Physical Review &amp; Research International</u></b>
Manuscript Number:	<b>2013_PRRI_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

	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)
<b><u>Compulsory</u></b> REVISION comments	<b>The authors should explain more clearly why the GPM is fast (e.g., how much faster than other methods?).</b>	Thank you, I tried to answer to your question in Sect. 3.4
<b><u>Minor</u></b> REVISION comments	<ol style="list-style-type: none"> <li>1. Fig1: why is the potential well asymmetric? Is the modified number density also asymmetric?</li> <li>2. Line 186: I guess the authors refer to the virial mass. Please specify it.</li> <li>3. Line 186: sentence is incomplete.</li> <li>4. Line 269: there is no Sect. 5 in the manuscript. Maybe Sect. 3.7? (typo?...)</li> <li>5. Line 301: I don't understand <math>\delta_{sh,7}=0</math>. From Fig. 3 I read <math>\delta(D=51\text{Mpc})=8.67</math>. Am I missing something?</li> <li>6. Sect. 3.7: is the cosmology assumed to compile the SCLCAT and GMBCG catalogs the same?</li> <li>7. Line 414: I don't understand reference to Fig. 1 here. Maybe Fig. 2?...?</li> <li>8. Sect. 3.8: what is the accuracy of photometric redshifts? Have the authors tried to account for</li> </ol>	<p>Answer to:</p> <ol style="list-style-type: none"> <li>1) the asymmetry of the well was due to the bad choice of the number of mesh points in the graphic routine. Now, the Fig.1 has been substituted with the corrected one.</li> <li>2) Yes. However I rearranged this issue in Sect. 3.2 – vi)</li> <li>3) rearranged elsewhere</li> <li>4)yes, my fault.</li> <li>5) You are right! The error has been fixed</li> <li>6) there are small differences in the choice of <math>\Omega_m</math>, <math>\Omega_\Lambda</math> and h. I had valuated the impact on my analysis: the bias on comoving distances should not exceed 1%.</li> <li>7)yes it is. Error fixed.</li> <li>8)the redshift accuracy is 10% as indicated in Sect. 3.2 iv) and it has been taken into account within the M.C. simulation performed in Sect.3.3</li> </ol>



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	photometric uncertainties by means of a Monte Carlo simulation?	
<b><u>Optional/General</u></b> comments	What is the authors's expectation for the application of the GPM to galaxy samples with the aim of identifying galaxy clusters?	The GPM can work well also on a galaxy sample but it requires an accurate reconstruction of the sample in real space which hardly can be obtained for very deep survey. I discussed this issue briefly in the Introduction.