

## Review Form 1.7

Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	Ms_PSIJ_111106
Title of the Manuscript:	On u-d Quark Coulomb Origin of Nuclear Force
Type of the Article	

### 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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>The paper discussing the Coulomb force in nuclei has gained significant interest among readers. I observed that the paper primarily focuses on one of the two forces present in nuclei. The author introduces the interaction potential using the Cornell potential, which successfully incorporates both the Coulomb force and confinement force. Additionally, the harmonic potential, as stated in Equation A15, is also incorporated. However, the paper lacks an explanation regarding the relevance of these aspects in determining the binding energies of the lightest nuclei. Another notable point is that the distance between "u" and "d" is mentioned as 3 fm, whereas previous works have often reported a distance no greater than 1 fm. It would be beneficial for the authors to provide the significance of these findings and highlight the advantages of their work. Additionally, it is recommended to update the references to include works published in 2023.</p>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is language/English quality of the article suitable for scholarly communications?</b></li> </ol>	<p>Should be edited.</p>	
<p><b>Optional/General</b> comments</p>		

### 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)
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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**Reviewer Details:**

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