

### Review Form 3

Journal Name:	<a href="#">Journal of Advances in Mathematics and Computer Science</a>
Manuscript Number:	Ms_JAMCS_128494
Title of the Manuscript:	<b>A Duality Principle and Concerning Convex Dual Formulation for a Model in Micro-Magnetism</b>
Type of the Article	

#### **General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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#### **PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	This article introduces a duality principle designed for originally non-convex primal variational formulations. The key contribution is the development of a convex (or concave) dual variational formulation for a micromagnetism model. The authors utilize fundamental methods from functional analysis, the calculus of variations, duality theory, and optimization in infinite-dimensional spaces. The significance of this work lies in its potential applications to a wide range of models in the calculus of variations, particularly in elasticity and phase transitions.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<b>It is suitable.</b>	
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>	The abstract should succinctly summarize the main results and contributions of the paper. Consider rephrasing to make it more concise	
<b>Is the manuscript scientifically, correct? Please write here.</b>	Yes, but formatting of the paper is not well. Authors need to improve the overall writing of the paper and thoroughly review the article to correct typographical errors and enhance clarity.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	Not upto date and authors ensure that references are cited in numerical order and follow a consistent style at the end of the paper.	

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<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>No, Need to improve it.</p>	
<p><b>Optional/General</b> comments</p>	<p>Here are my comments and suggestions.</p> <ol style="list-style-type: none"> <li>1. The review is thorough but could be organized better to highlight gaps in the existing literature that this paper addresses.</li> <li>2. Clearly state the main objectives and contributions of the paper towards the end of the introduction.</li> <li>3. Although the derivations seem solid, additional details or examples illustrating key proofs could enhance comprehension, especially for readers less familiar with advanced functional analysis.</li> <li>4. Provide numerical examples to illustrate the applicability of the main result.</li> <li>5. The article could benefit from a more detailed comparison with existing approaches in duality for non-convex variational problems.</li> <li>6. Summarize the main contributions of the paper in the conclusion.</li> <li>7. Author should use the full comma (,) page 1 line (-4) after the word now. Full (.) line (+3) page 2, use comma (,) line (+8) after the word moreover, use comma after word here line (+13) page 2, line (+19) page 2 after the word here. Use full (.) line (+3) page 3, line (-2) use comma after the word here page 3.</li> <li>8. Proofread the paper to correct any typographical and grammatical errors.</li> </ol> <p>Based on my expertise as a reviewer, I recommend the paper for publication after these major revisions.</p> <p><b>All the best, Reviewer</b></p>	

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><b>Author's comment</b> (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>
<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>	

**Reviewer Details:**

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<p>Department, University &amp; Country</p>	<p><b>Nanjing Normal University, China</b></p>