Review Form 3

Journal Name:	
Manuscript Number:	**Ms_ARJOM_130006**
Title of the Manuscript:	**Quasi-Matroid on connectivity system**
Type of the Article	**Short Research Article**

<mark>PART 1:</mark> Comments

	Reviewer's comment	Author's Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
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.	**This manuscript introduces quasi-matroids on connectivity systems, extending classical matroid theory and connecting it to linear-width parameters and restricted linear tangles. By bridging these concepts, it opens new avenues for research in graph theory, optimization, and discrete mathematics. The findings have potential applications in network analysis and combinatorial optimization, providing a foundation for further theoretical and empirical studies.**	
Is the title of the article suitable? (If not please suggest an alternative title)	**Suitable**	
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.	**The abstract is concise and effectively highlights the significance of quasi-matroids and their relationship to connectivity systems. However, if authors can provide more specificity about the findings or contributions of the paper, it would help improve the overall viewer understanding on the topic.**	
Is the manuscript scientifically, correct? Please write here.	Based on the content reviewed, the manuscript appears to be scientifically correct. The proofs provided by authors are coherent and adhere to rigorous standards, effectively linking quasi-matroids, linear tangles, and related concepts.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	

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Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	1. **Introduction – Please provide explanation on the concepts like "graph width parameter.", why it's essential to the study?** 2. **Preparation – Please include a brief examples to illustrate abstract concepts, such as the connectivity system. Also, authors are advise to avoid using the word "we" in paper, for example, "In this paper, we use expressions like A ⊆ X..." for a more formal tone, e.g., "The notation used in this paper includes...".** 3. **Symmetric Submodular Function and Connectivity System – Please revise and ensure that citations for "Lemma 1 [15,16]" are specific and directly relevant to the context.** 4. **Quasi-Matroids – Please clarify the practical implications or applications of the axioms introduced, particularly Axiom (M4).** 5. **Main Theorem – Please consider including a diagram or example to visualize the concepts discussed in the proof, such as partitions.** 6. **Future Tasks – Please provide a specific information about what aspects of feeble matroids or fuzzy matroids will be explored.**	

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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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