Review of: "Multiplicity of solutions for nonlocal fractional equations with nonsmooth potentials"

Hamza El-Houari[1]

1 University Sultan Moulay Sliman

Potential competing interests: No potential competing interests to declare.

In the paper under review, the authors have examined a class of nonlocal fractional Laplacian problems involving nonsmooth potentials. They applied the Ricci critical point theorem as part of their methodology. The arguments used in this paper are standard but also reflect the authors' considerable effort and contribution to the field.

1-Please clarify the novelty of this paper with respect to the published paper.

2- The authors should add an example where their results can be applied

3- Replace “problem 1.1” by “problem (1.1)” in all the paper

4- Page 2, line 2 under equation (1.3): Replace $\mathbb{R}^N$ by $\mathbb{R}^n$

5- The last paragraph in section 1 “However, we should mention…our results are more interesting” is unclear.

6- Page 3, in the definition of X_0, what means by “a.a.”?. Chek all the paper.

7- Define the norm used in Definition 2.1 and make a space betwin η and $\in$

8- In definition 2.3, mentioned the type of the solution

9- the reference [39] is not mentioned in the paper

10- In Theorem 2.1, change the space X to X_0 and their corresponding norm,

11- In definition 2.2, define the set X^*

12- Make a conlusion.

13- If the authors agree they can refer to the following work which used the Ricci critical point theorem in the context of fractional Orlicz-Sobolev space

[x] Chadli, L. S., El-Houari, H., & Moussa, H. (2023). Multiplicity of solutions for nonlocal parametric elliptic systems in fractional Orlicz–Sobolev spaces. *Journal of Elliptic and Parabolic Equations*, *9*(2), 1131-1164.

In the revised version the authors could address all my comments and remarks. I am OK with the revisions, I suggest the editor to accept the paper for publication.