

Review of: "On Ekeland Variational Principle and Its Applications Through Fuzzy Quasi Metric Spaces with Non-Archimedean t-norm"

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Potential competing interests: No potential competing interests to declare.

The article introduces the Ekeland Variational Principle (EVP) and presents several results within fuzzy quasi-metric spaces (FQMS) under non-Archimedean t -norms. The authors define the basic topological properties and establish a partial order relation on FQMS. By applying the Brézis-Browder principle to a partially ordered set, the EVP is extended to FQMS. Additionally, the paper derives Takahashi's minimization theorem, which guarantees the existence of an optimal solution without relying on the compactness or convexity of the underlying space. An equivalence chain between the EVP and Takahashi's theorem is also provided. Finally, the paper thoroughly discusses the Banach and Caristi-Kirk fixed point theorems.

The results presented by the authors are well-supported and significant. However, the inclusion of one or two explanatory examples would greatly enhance the paper, aiding readers in better understanding the main results and their applications. Additionally, providing these examples would illustrate the practical implications of the theoretical findings.