

# Review of: "Determining Affinity of Social Network using Graph Semirings"

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**Potential competing interests:** No potential competing interests to declare.

The research introduces an algorithm for analyzing the stability and affinity of connections between distinct social groups within a social network, exemplified through Facebook. By modeling the social network as a graph, the paper breaks it down into components representing different user categories. Stability is gauged through graph connectivity metrics like average vertex degree and beta index, allowing the algorithm to identify the most stable path between two network components.

The paper adeptly applies graph theory to simulate social network connections, with user categories represented by graph components and stability measured using specific connectivity metrics. Using Facebook as an illustration effectively showcases the algorithm's relevance. However, the study could benefit from broader analysis on real-world social network datasets. There's room for refining the user categorization and offering more empirical validation for the geometrical interpretations based on Facebook use scenarios.