

Review of: "Time evolution and convergence of simple migration models"

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Potential competing interests: No potential competing interests to declare.

General feedback: Overall, the article gives a great an in-depth overview of the concept of the Gravity and Radiation models and how they can be used to solve various mobility issues. The paper is organized logically, with parts dedicated to the analysis of the Gravity and Radiation models and the convergence of migration models. The fundamental concepts discussed in the article are better understood and illustrated through the use of equations and figures.

However, there are some areas where the article could be improved:

- 1. *In the introduction*, It would be helpful to provide a brief historical or general overview of the various migration models, their notable features, and why you selected Gravity and Radiation models before diving into the convergence analysis.
- 2. While the paper does a fine job of explaining the models in general, certain sections could benefit from further explanation. For instance, the explanation of Equation (2) in the Gravity model section is not clear as to how the flow ratio is derived. Providing a brief explanation would improve understanding.
- 3. The *article's figures* are informative, but the captions could be more descriptive, providing a clear explanation of what each figure symbolizes and how it refers to the topic at hand. The Radiation model section could also benefit from a more detailed explanation of how the intervening opportunities are calculated and their significance in the model.
- 4. *Methodology*: The article briefly mentions the use of stability and linear stability analysis, but it would be beneficial to include more information on methods and mathematical foundations to understand the analytical approach used to examine the models' stability.
- 5. Results and Discussion: The conclusion and discussion of the article are relatively restricted. It would be useful to provide a more in-depth analysis and interpretation of the results, connecting them to real-time applications and their implication. Additionally, the paper could examine the model's limitations and possible directions for further study.

Therefore, the article offers a strong basis for further research into the convergence and stability of the Gravity and Radiation models under migration-related conditions. With some improvements in clarity, methodology, results, and discussion, the research's significance and accessibility could be enhanced for a wider audience.