

Review of: "Correlation and Autocorrelation of Data on Complex Networks"

Mansoureh Naderipour¹

¹ Amirkabir University of Technology

Potential competing interests: No potential competing interests to declare.

This paper considers correlation and autocorrelation of data on complex networks. However, the document must be majorly revised before being able to be published. Major and minor concerns are addressed as follows:

Major comments:

1. I suggest you change the title of the paper. The title is not suitable for an article and is more related to the topic of a book. It should be more related to your work.
2. In contrast to what is suggested in the Introduction, there are indeed existing works that consider this problem. Different takes on the same idea are still allowed, of course, but it will be necessary to highlight what is done differently compared to previous approaches.
3. The section jumps right into the mathematical details of the model, without explicitly describing the model used. It wouldn't hurt to start by introducing the notation and all relevant mathematical symbols directly at the beginning of the section called "Method and Materials" (e.g., in a table), instead of later in the middle of the algorithm and sections.
4. It is suggested that the mentioned approaches be shown schematically so that they are completely understandable for the reader.
5. It wouldn't be used equation in the introduction section. It is better to mention it in other sections (e.g., section "Method and Materials").
6. All figures and tables in the text should be addressed in the text before them, which is rarely observed in this paper (e.g., Fig. 4 and Table 1 and the others). Moreover, explanations should be given about them after.
7. On page "20", how " $l=0.174$ " is obtained? It is not clearly defined.
8. "W" is the weight matrix or the adjacency matrix? All symbols must be unique. In this paper, "A" is the adjacency matrix or "W"?! It is confusing.
9. All references should be cited (e.g., section 5.1).
10. The abstract and conclusion should be sharper.

Minor comments:

1. The punctuations are weak.
2. References do not have the same format (e.g., [3], [4], [5], [6]). Moreover, some of them have incorrect symbols (e.g., in[1]: eaao?!).



The language quality should be improved.