

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

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

The paper offers a review of some metrics useful for quantifying correlation structures within complex networks. Generally speaking, the paper addresses a relevant topic and is worth publishing. However, there are, in my opinion, some flaws that should be addressed.

The structure of the paper does not follow the "usual" structure of scientific papers (introduction with SOTA, materials and methods, applications, discussion, conclusion). The current layout makes it quite hard to identify what the current situation is in terms of metrics (i.e., how the problem has been addressed by recent literature) and, as a consequence, what the flaws and the added value provided by the author are.

The topic is quite large, in the sense that the paper could be potentially read by scientists working in very different areas. This may mean that not everybody is familiar with the concepts and quantities mentioned in the paper. Although, in my opinion, a clear and grounded language is already used, a little more "guiding" of the reader through the calculations required by the applications could be useful. Speaking of examples, I renew my suggestion of collecting all the applications (be they synthetic experiments or real-world cases) under a unique section.

One last comment is just my personal interest. What happens if the values assigned to a node are replaced by a time series of values? Could the calculations still apply? I am thinking, for instance, about electric or water consumption measured over a period in a number of nodes of the energy or water supply network. A comment about this could enlarge the potential impact of the paper.