

# Cover letter of resubmission “The impossibility of low rank representations for triangle-rich complex networks”

C. Seshadhri, Aneesh Sharma, Andrew Stolman, and Ashish Goel

To the editor,

Our paper “The impossibility of low rank representations for triangle-rich complex networks” is a result on the mathematical foundations of network science. The main message is that the classic technique of SVD and low-dimensional embeddings, workhorses of data analysis and machine learning, may be *inappropriate* for the study of massive real-world networks.

This is resubmission, based on the initial comments of the referees. We have made substantial changes, and done a series of new experiments. To aid a clear understanding of the changes, in addition to the main paper, we have also submitted the following files.

- referee-response.pdf: This file explains the major changes, and gives a response for all the referee comments.
- embeddinglb-pnas-revision-annotated.pdf: The same text as the main paper, except all new text marked in red.