Referee's report on
"Theory of semidefinite programming for sensor network localization"
by
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This paper presents a semidefinite programming model for sensor network localizations. This problem can be thought of as a special case of the graph realization problem where the coordinates of a subset of the nodes are known. The paper also discusses some related problems in distance geometry.
The sensor network localization problem is an important problem which has received a great deal of attention recently. The semidefinite approach to this problem is quite elegant and promising. The results obtained in this paper are new and interesting. The paper is well written and easy to read. Furthermore, the references are comprehensive.
Thus we recommend that this paper be accepted for publication. We would like to add one comment. The SDP problems in (3) and (4) seem complicated due to the notation used. We believe that these two problems might be simplified by using more appropriate notation.
Finally there is a typo on page 4. Replace well-known by well known in the line before (2).