

Review of: "Reconfigurable Intelligent Surface Constructing 6G Near-field Networks"

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Potential competing interests: No potential competing interests to declare.

The work carried out provides an overview of the research landscape on RIS in near-field communication regimes and also its impact on future 6G networks. However, the contribution made has a lot of scope for improvement.

Some Comments:

- The absence of figures and is limiting the impact of the overall paper. That includes figures that describe use cases or propagation conditions would significantly enhance presentation and engagement.
- The paper either limits or lacks formulas. The only formulas found describe the near-field conditions. Additional formulations should be provided, such as how channels and array response vectors are described in both near-field and far-field regimes. For example, the section on near-field channel modeling would greatly benefit from additional formulations.
- Several sections, such as 5.2 and 5.3, present discussions as listed points. These lists briefly represent relevant aspects but lack detailed discussion. It is recommended to consider presenting these points in more schematic tables while developing discussions from these lists within the text. This would enhance the added value of the paper.
- The paper currently does not include any kind of simulation results or any pictorial plots.
- An important and emerging research area related to RIS in near-field conditions is wave-front engineering. The authors are strongly encouraged to incorporate works in this regard, such as those on Airy beams, Bessel beams, and reconstructing beams with RIS.