This paper investigates the deployment problem of a STAR-RIS and beamforming optimization in communication systems. The main focus is on optimizing user grouping, which is interesting and easy to follow. However, some assumptions on the system model are overly idealistic, and some questions need to be addressed and clarified as follows:

1. The placement of the RIS affects the channel distribution of the whole system including large-scale and small-scale parameters. After obtaining the RIS location, the channel needs to be further estimated, which can be used to optimize the subsequent beamforming vectors, so how is this achieved in practical? As shown in [A], CSI models are different before and after IRS deployment, and the objective function appears differently before and after IRS deployment. Therefore, this important feature invalidates the conventional alternating optimization (AO) algorithm to solve the joint optimization problem.

[A] Xu, J., Yuen, C., Huang, C. et al. Reconfiguring wireless environments via intelligent surfaces for 6G: reflection, modulation, and security. Sci. China Inf. Sci. 66, 130304 (2023). https://doi.org/10.1007/s11432-022-3626-5

1. Note that in typical RIS-aided communications, imperfect CSIT may bring severe performance loss due to the mismatched resource allocation, and hence robust design is widely investigated, such as in [B]. Considering that the proposed scheme involves user grouping and beamforming design, whether the algorithm has sufficient robustness to imperfect CSIT? Related simulations are needed.

[B] J. Yao, J. Xu, W. Xu, D. W. K. Ng, C. Yuen and X. You, "Robust Beamforming Design for RIS-aided Cell-free Systems with CSI Uncertainties and Capacity-limited Backhaul," in IEEE Transactions on Communications, doi: 10.1109/TCOMM.2023.3277539.

1. In addition, this heuristic approach to location optimization is limited by computational complexity and is not scalable; in fact, there is no guarantee of convergence, and if you use the method in each iteration, the overall algorithm may not converge, heavily depending on the initial value and iteration step size.
2. The optimization problem of Formula (14) does not make any contribution, because the optimization goals and constraints have been thoroughly studied in the literature, e.g., [C], and the author needs to clarify the novelty of the proposed optimization problems and the algorithm.

[C] Q. Gao, Y. Liu, X. Mu, M. Jia, D. Li and L. Hanzo, "Joint Location and Beamforming Design for STAR-RIS Assisted NOMA Systems," in IEEE Transactions on Communications, vol. 71, no. 4, pp. 2532-2546, April 2023, doi: 10.1109/TCOMM.2023.3247753.

1. Where do the performance gains of the proposed grouping method come from? In the simulation results, the author needs to give careful analysis and insights.
2. The author should compare the entire algorithm including deployment, grouping, and beamforming optimization with other iterative algorithms and indicate how much gain is brought by position optimization versus beam optimization in numerical results.
3. A theoretical analysis and simulation results are required to evaluate the convergence of the entire algorithm, including the optimization of RIS position, user grouping, and subsequent beamforming.