

Minor revisions request for manuscript NUMA-D-17-00638

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I am grateful to the reviewers for their comments on the revised version of this manuscript. Here is an answer to their comments.

Comments by Reviewer #1

I corrected the typo indicated by the reviewer whom I thank for their precise indications. The main comment I wish to answer is the last one:

The complexity $O(P^2 \log P + \dots)$ is wrong. The complexity is proportional to the bandwidth.

I don't understand why the formula is wrong, however, I acknowledge that I did not provide details on how I obtained this formula. The complexity indicated in the reference is

$$O(|I_N| \log |I_N| + |\log \varepsilon|^2 (N + M)),$$

where, as far as I understand, $|I_N| = N_1 N_2$ where N_1 and N_2 are the bandwidth along each dimension. Here, all the frequencies lie in a circle of radius $\rho_P \approx \pi P = O(P)$. Therefore, the term

$$O(|I_N| \log |I_N|)$$

gives an order $O(P^2 \log(P))$. I included more details on this computation in the new revision of the manuscript. I hope that this is indeed correct and if so, that it is clearer than before.

Comments by Reviewer #2

I wish to thank the second reviewer for his encouraging comments on my manuscript. I incorporated his suggestions to the revised versions. Upon his remark, I used the term "annulus" instead of "ring" and replaced every instance of $\mathcal{R}(a)$ by $\mathcal{A}(a)$.