

## *Pauli crystal melting in shaken optical traps*

I reckon that most of the answers provided by the authors in their reply letter are satisfactory and explanatory, and I am convinced that this is a sound and timely work with very interesting results. However, I would like to ask one follow-up question just to better understand some of the answers provided by the authors. Therefore upon further clarification of this point I endorse publication of the manuscript as an article in the journal.

1. As the authors replied the one-body density of the fermionic system can reveal the most probable positions of the particles, without however fully exposing the statistical correlations. This is the reason why one has to consider the configuration density, where the Pauli crystals are identified. Is therefore the configuration density suitable for extracting the crucial information from the N-body density, which fully describes the system ? If this is the case, the configuration density does not also suffer from the visualization constraints inherent in the N-body density, and this might be another reason why it is preferred. If the above arguments are valid, my opinion is that it would be very helpful to include them explicitly in Section III A of the main text.