Optimal covariant quantum measurements

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Significance
req Clarity

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Recommendation

Amendments required before acceptance

COMMENTS TO THE EDITOR(S)

COMMENTS TO THE AUTHOR(S)

The authors did implement all my comments in the revision, but not always in an optimal way. While the Introduction and the first part of the paper are now much clearer and more readable, there remained some parts that should be improved. Especially, the conditions (a) - (c) on p. 32 are very technical and my recommendation was to add some comprehensible description of the cases where the conditions apply. The intention was to give the reader some understanding or intuition on these conditions, I apologize if I did not make this clear. Instead, the authors added lots of technical details, all packed into long sentences containing

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one technical definition after another.

The paper was already too technical as it was and especially the second part (on the case of compact stability group) is not accessible to readers not closely familiar to the details of some previous works of the authors. The authors should find some way to present their results in a more accessible way, reduce unnecessary technicalities and provide some intuition to readers outside a small circle of experts.

There are other places with dense paragraphs containing long sentences of technical definitions connected by "such that" or "this means that" (e.g. the first paragraph on p. 24 or the last one on p. 31, but this appears throughout the paper, especially from Sec. 5 onward).

Some more comments:

- sometimes some words are missing, e.g. on p. 33,..."linear hull product form fields..." missing "of"
- some formulations are confusing, e.g. p. 33, the sentence beginning by "Thirdly..."

Files attached

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