Re: LN15708B

Topological magnons in a one-dimensional itinerant flat-band ferromagnet

by Xiao-Fei Su, Zhao-Long Gu, Zhao-Yang Dong, et al.

Dear Dr. Su,

The above manuscript has been reviewed by two of our referees. Comments from the reports appear below for your consideration.

When you resubmit your manuscript, please include a summary of the changes made and a brief response to all recommendations and criticisms.

Yours sincerely,

Robert Konik

Associate Editor

Physical Review B

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Second Report of Referee A -- LN15708B/Su

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The authors have properly responded to most of my previous questions/comments and have added more discussions about the Tasaki model under investigation. While basically this revised manuscript presents rather systematic investigations about the topological magnon state under the Tasaki model now, I have some concerns about this revised manuscript:

1. The authors claimed that their work "is the first proposal of the itinerant topological magnons" in the revised manuscript. However, this work much focuses on the computational results, with the underlying physical mechanism not well understood. Therefore, this manuscript, while forms a good piece of work, does not guarantee the novelty as claimed in my opinion. Such claim should be removed, unless the fundamental mechanism could be provided.

2. In the reply, the authors state that "the Berry phase of the Stoner continuum is π mod 2π", does this mean that there is also nontrivial topological magnon in the Stoner continuum?

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Second Report of Referee B -- LN15708B/Su

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After carefully reading the response of the authors I got convinced the manuscript can be published in Physical Review B. The authors have answered my questions in a very clear way. The authors have updated the manuscript at places where it was needed to meet my concerns, suggestions, and/or comments. I would like to wish the authors good luck in their future research.