**Topological magnons in a one-dimensional itinerant flatband ferromagnet**

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Different from previous scenarios that topological magnons emerge in local spin models, we propose an alternative that itinerant electron magnets can host topological magnons. A one-dimensional Tasaki model with a flatband is considered as the prototype. This model can be viewed as a quarter-filled periodic Anderson model with impurities located in between and hybridizing with the nearest-neighbor conducting electrons, together with a Hubbard repulsion for these electrons. By increasing the Hubbard interaction, the gap between the acoustic and optical magnons closes and reopens while the Berry phase of the acoustic band changes from 0 to π, leading to the occurrence of a topological transition. After this transition, there always exist in-gap edge magnonic modes, which is consistent with the bulk-edge correspondence. The Hubbard interaction-driven transition reveals a new mechanism to realize nontrivial magnon bands.