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Symmetry-protected edge states in periodically driven band insulators OLEKSANDR BALABANOV, HENRIK JOHANNESSON, University of Gothenburg — The symmetry-protected edge states in topologically non-trivial band insulators are robust to any perturbations that are localized on the edges and preserve the relevant symmetries. In recent work we have found that the edge states in driven (Floquet) systems may be resistant to a much broader class of perturbations as compared to the time-independent case. We illustrate our finding by a numerical computation on the harmonically driven SSH model. A proposal for an experimental test using cold atoms is presented.

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