1135-81-1454 **Bruno Nachtergaele**, **Robert Sims** and **Amanda Young***, Department of Mathematics, University of Arizona, 617 N. Santa Rita Ave., Tucson, AZ 85721. *On the stability of frustration-free lattice fermion systems.* Preliminary report.

In recent years, there have been several results on the spectral gap stability for frustration-free quantum spin models with topologically ordered ground states. In this talk, we consider frustration-free lattice fermion systems with a non-vanishing spectral gap above one or more (infinite-volume) ground states and describe how the stability results in the quantum spin setting can be extended to these situation. (Received September 22, 2017)