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**Judith R Miller\***, jrm32@georgetown.edu. *Adaptation of complex traits in biological invasions*. Preliminary report.

It is widely acknowledged that adaptation plays a key role in the establishment and spread of invasive species, but few theoretical studies of this problem exist. Here we incorporate nongenetic population characteristics known to affect invasion speed and success into a modified version of a classic spatial genetic model due to Kirkpatrick and Barton. We present numerical results that help resolve the apparent sharp disparity between outcomes of the Kirkpatrick-Barton model and of the corresponding model in which genetic variance, the raw material of adaptation evolves freely. We also examine the state of rigorous analysis of this family of models. (Received September 03, 2013)