

1145-82-2384

**Robert Sims\*** (rsims@math.arizona.edu), **Houssam Abdul-Rahman** and **Gunter Stolz**.

*Low Energy Localization Properties of Disordered Harmonic Oscillators.*

We review some recent results on disordered harmonic oscillator models. In particular, at fixed disorder, we prove zero velocity Lieb-Robinson bounds, quasi-locality estimates for the dynamics, and exponential decay of dynamic correlations in eigenstates. The main stress here is that we do not require the model to be in the fully many-body localized phase. (Received September 25, 2018)