

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

A multiscale algorithm for pulled fronts in reaction-diffusion JASON DEVITA, UCLA Mathematics — I will present a numerical scheme for simulating front propagation in the discrete $A \rightarrow 2A$ reaction-diffusion problem. The FKPP equation describes the continuum approximation to the particle model. However it has been suggested that the dynamics of the particle model converges very slowly to the continuum dynamics. As such, it is infeasible to probe the approach to continuum with a purely particle-based method. Instead, we have created a hybrid model which properly treats important fluctuations where needed.

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Date submitted: 20 Nov 2006

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