Two speedups

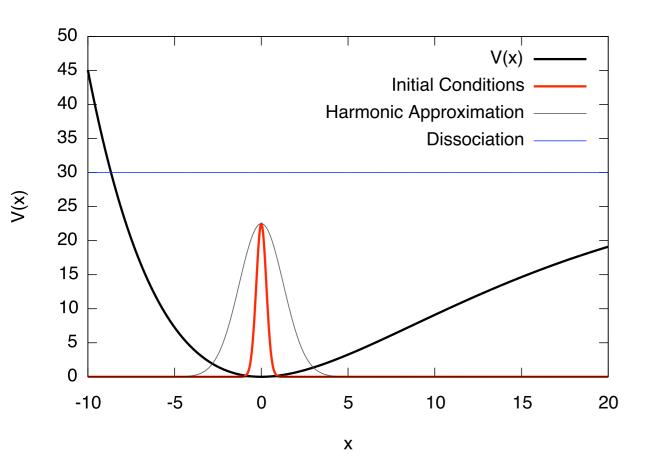
1. Each trajectory can by accepted by more than one distribution: reducing the number of semiclassical trajectories.

2. Each trajectory only needs to be run one time (we sample all distributions simultaneously): massive reduction in the number of classical trajectories.

$$\int dx A(x)B(x)C(x) = N_{AB} \left\langle e^{i\phi_{AB}(x)}C(x) \right\rangle_{A(x)B(x)}$$

A Simple Test

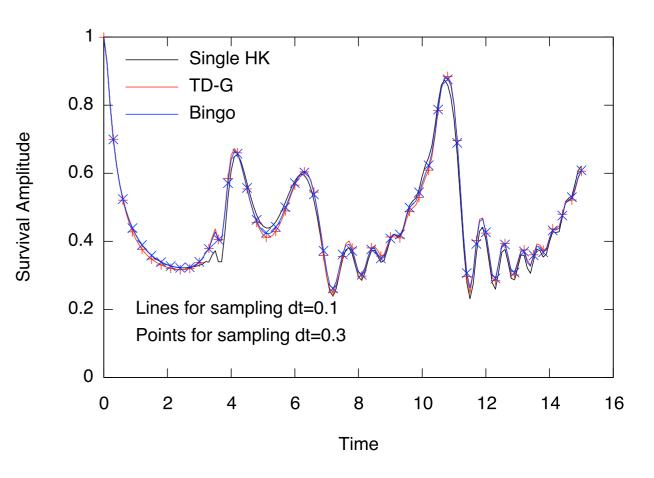
Model System



$$V(x) = 30.0 \left(1 + \left(1 - e^{-0.08x} \right)^2 \right)$$

$$\langle x|\psi\rangle = \left(\frac{12}{\pi}\right)^{1/4} e^{-6x^2}$$

Survival Amplitude



$$\mathcal{A}(t) = \sqrt{C_{AB}(t)}$$

$$\hat{A} = \hat{B} = |\psi\rangle \langle \psi|$$