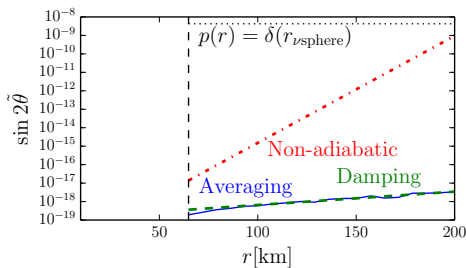
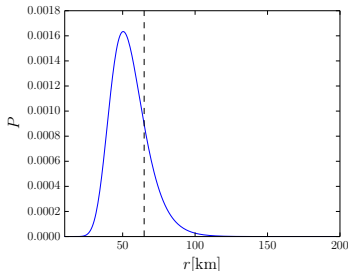


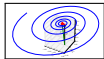
# The Onset of Neutrino Oscillations in Supernovae, Rasmus S. L. Hansen, MPIK

Average over emission point:

$$\sin 2\tilde{\theta} = \int_0^r p(r_e) \sin 2\theta_m(r_e) \exp\left(i \int_{r_e}^r \omega_m(r') dr'\right) dr_e.$$



Include effect of collisions:  $\dot{\vec{P}} = \vec{V} \times \vec{P} - D\vec{P}_T.$



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Non-linear averaging:

