

## Asymptotic stability of multi-solitons for 1d supercritical NLS

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In this talk, for 1d supercritical NLS, we explain that there exists a Center Stable Manifold with finite co-dimension such that if the initial small perturbation of the well-separated multi-solitons belongs to this Manifold, then the solution of the NLS converges in the  $L^2$  norm to the sum of solitons moving with constant speed plus radiation (scattering term). This is a joint work with Gong Chen.

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