

Decay and Scattering in energy space for the solution of generalised Hartree equation

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We prove decay with respect some Lebesgue norms for a class of Schrödinger equations with non-local nonlinearities by showing new Morawetz inequalities and estimates. As a straightforward product we obtain large-data scattering in the energy space for the solutions to the defocusing generalized Hartree equations with mass-energy intercritical nonlinearities in any space dimensions.