Asymptotic profiles of groundstates for a class of Choquard equations

Vitaly Moroz (Swansea)

Abstract. We study the asymptotic behaviour of groundstates for a class of singularly perturbed Choquard type equations with a local repulsion term. We identify seven different asymptotic regimes and provide a characterisation of the limit profiles of the groundstates when perturbation parameter is small. We also outline the behaviour of groundstates when perturbation is strong.

This is a joint work with Zeng Liu (Suzhou, China).