Positive bound states to nonlinear Choquard equations via the Nehari method

Liliane Maia¹

 1 UnB

We will present some recent results on the existence of positive solutions for a class of Choquard equations with potential decaying to a positive limit at infinity, under no symmetry assumption. Precise decay estimates and interactions of translated solutions of the limit problem are necessary. We will consider the cases in which the corresponding limit problem at infinity has a unique solution. Our results in particular include the physical case. This is a work in collaboration with Benedetta Pellacci and Delia Schiera (Università della Campania "Luigi Vanvitelli", Caserta, Italy).