1139-35-103 Santosh Bhattarai^{*}, Trocaire College, 360 Choate Ave, Buffalo, NY 14220. Normalized solutions for some fractional Schrödinger equations.

We prove existence of solutions with prescribed mass for some fractional nonlinear Schrödinger equations. Our approach involves characterizing these solutions as minimizers for a constrained variational problem. To establish the relative compactness of minimizing sequences via concentrated compactness, we show that the minimum value of the objective functional depends strictly subadditively on the values of the constraint functionals. We also discuss the orbital stability of the associated standing waves. (Received February 03, 2018)