

## Local uniqueness of ground states for generalized Choquard model

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We consider the generalized Choquard equation describing trapped electron gas in 3 dimensional case. The study of orbital stability of the energy minimizers (known as ground states) depends essentially in the local uniqueness of these minimizers. In equivalent way one can optimize the Gagliardo–Nirenberg inequality subject to the constraint fixing the  $L^2$  norm. The uniqueness of the minimizers for the case  $p = 2$ , i.e. for the case of Hartree–Choquard is well known. The main difficulty for the case  $p > 2$  is connected with possible lack of control on the  $L^p$  norm of the minimizers.