

Localization of eigenvalues for non–selfadjoint operators

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We give a group of results on the localization of eigenvalues, or absence thereof, for Dirac operators in arbitrary dimension, perturbed by non hermitian potentials of sufficiently small size in critical norms. In particular, we extend to higher dimensions the 2014 one dimensional result due to Cuenin, Laptev and Tretter. The main tools we use are an abstract Birman-Schwinger principle combined with suitable sharp resolvent estimates. The results are contained in joint papers with L.Fanelli, D.Krejcirik and N.Schiavone.