Joan Mateu | Universitat Autònoma de Barcelona – CRM Title: Global minimisers of energies related to dislocations

Abstract: We will discuss the characterization of the minimisers for a class of non-local perturbations of the Coulomb energy. It is shown that this minimisers are given by the characteristic function of an ellipsoid. We will see how techniques on Calderón-Zygmund operators are used to obtain this type of results.