CARDINALITY ESTIMATION OF SUPPORT OF THE GLOBAL MINIMIZER FOR INTERACTION ENERGY WITH MILDLY REPULSIVE POTENTIALS.

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1. Abstract

In this talk, we give a cardinality estimation of support of the global minimizer for interaction energy with mildly repulsive potentials. For the global minimizer \( \mu \), the fact that \( \text{supp}(\mu) \) consists of finitely many points was proved in [1]. Moreover, the authors found a cardinality estimation of support of \( \mu \) on \( \mathbb{R}^1 \). We advance some improvement of this result. We give an upper estimate of \( \text{card}(\text{supp}(\mu)) \) for arbitrary dimension \( d \). This talk is based on a joint work with Kyungkeun Kang and Hwa Kil Kim.

References