

On Schrödinger equations with inverse-square singular potentials

V. Felli

We will present the results obtained in collaboration with Susanna Terracini and Elsa M. Marchini about the asymptotics of solutions to Schrödinger equations with singular dipole-type potentials. We evaluate the exact behavior near the singularity of solutions to elliptic equations with potentials which are purely angular multiples of radial inverse-square functions. Both the linear and the semilinear (critical and subcritical) cases are considered.