

V. BRUNEAU (vincent.bruneau@u-bordeaux.fr) I.M.B, Bordeaux

On the measurement of an obstacle subjected to a constant magnetic field

We study resonances, near the Landau levels, for the 3D Magnetic Schrödinger operator in presence of an obstacle. Depending on the boundary condition, we analyse the localization of the resonances in the complex plane. We also prove that the asymptotic expansion of the counting function of resonances - and of the scattering phase - near Landau levels involve the *logarithmic capacity* of the "Shadow of the obstacle" (the projection of the obstacle onto the plane perpendicular to the magnetic field).