Meeting: 999, Nashville, Tennessee, SS 9A, Special Session on Inverse Problems

999-35-201 Gregory Eskin (eskin@math.ucla.edu), Dept. of Math, UCLA, Los Angeles, CA 90095-1555, and James V Ralston\* (ralston@math.ucla.edu), Dept. of Math., UCLA, Los Angeles, CA 90095-1555. Inverse Spectral Problems in Rectangular Domains.

We consider the Schroedinger operator in n-dimensional rectangular domains with either Dirichlet or Neumann boundary conditions on their faces. We find constraints on the potential imposed by fixing the spectrum of the Schroedinger operator with these boundary conditions. (Received August 23, 2004)