

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

999-34-78 **Marco Marletta*** (`scmmm3@cs.cf.ac.uk`), School of Mathematics, Cardiff University, PO Box 926, CF243HE Cardiff, Wales, Wales, and **Rudi Weikard**. *On the Borg-Levinson Problem*.

We consider the problem of recovering the (possibly complex) potential in a regular Sturm-Liouville equation $-y''+q(x)y = \lambda y$ from spectral data (one Dirichlet-Dirichlet spectrum and one Dirichlet-Neumann spectrum, for example) and attempt to answer the following question: if only finitely many eigenvalues (say N) are known with some accuracy ϵ , how much can one really say about q ? (Received August 10, 2004)