1127-47-361 **Robert Wolf*** (`robert.wolf@uky.edu`), 270 Malabu Drive, Lexington, KY 40502, and **Peter Hislop**. *Compactness of Isoresonant Potentials.* Preliminary report.

Brüning considered sets of isospectral Schrödinger operators with smooth real potential on a compact manifold of dimension 3. He showed the set of potentials associated to an isospectral set is compact in the C^∞ topology by relating the spectrum to the trace of the heat semi-group.

Similarly, we can consider the resonances of Schrödinger operators with real valued potentials on $\mathbb{R}^3$ whose support lies inside a ball of fixed radius that generate the same resonances as some fixed Schrödinger operator, an "isoresonant" set of potentials. Using the Poisson formula to relate the resonances to the trace of the wave group, we can show that this "isoresonant" set of potentials is also compact the C^∞ topology. (Received February 07, 2017)