Artur Avila, David Damanik and Zhenghe Zhang* (zzhang@rice.edu). The Subshift Conjecture.

In the talk we discuss Barry Simon’s subshift conjecture, which states that the spectrum of 1D discrete Schrödinger operator associated with a minimal aperiodic subshift has zero Lebesgue measure. We use approximation with subshifts of finite type along with an analysis of the spectra associated with periodic orbits in them to produce a counterexample. This is joint work with Artur Avila and David Damanik. (Received February 01, 2015)