1021-37-177 **Zoran Šunić*** (sunic@math.tamu.edu) and Rostislav Grigorchuk. Schreier spectra and self-similar groups. Preliminary report.

We present a method of calculating the Schreier spectrum of some self-similar groups. The method is based on earlier work of Bartholdi and Grigorchuk and relies on the use of multi-dimensional dynamical systems. The examples include an infinite family of self-similar groups of intermediate growth and the Hanoi Towers group. (Received September 04, 2006)