1057-47-464   **Zheng Gan*** (`zheng.gan@rice.edu`), Math Department - MS 136, Rice University, 6100 S. Main Street, Houston, Texas 77005. *Cantor groups and Limit-periodic Schoedinger Operators*

We study the spectral properties of one-dimensional discrete limit-periodic Schoedinger operators. The perspective we take was first proposed by Avila and is based on regarding such potentials as generated by continuous sampling function along the orbits of a minimal translation of a Cantor group. This point of view allows one to separate the base dynamics and the sampling function. For any such base dynamics, we will show that the spectrum of each type (a.c., s.c. & p.p) can occur for limit-periodic potentials and how often it does so. We will also discuss the uniform localization of the p.p. spectrum. (Received February 01, 2010)