1057-47-187 **Helge Krueger\*** (hk7@rice.edu), Dept. of Math., Rice Univ., 6100 S. Main St., Houston, TX 77005. Recent progress on Schroedinger operators with potential  $V(n) = 2\lambda \cos(2\pi \alpha n^{\rho})$ .

I will discuss recent progress concerning understanding the Schroedinger operator with potential  $V(n) = 2\lambda \cos(2\pi\alpha n^{\rho})$ . The case  $\rho = 1$  corresponds to the Almost–Mathieu operator, and is reasonably well understood, I will discuss results for other values of  $\rho$ . (Received January 21, 2010)