1042-42-127 Kasso Okoudjou* (kasso@math.umd.edu), Department of Mathematics, University of Maryland, College Park, MD 20742, and Luke Rogers and Robert Strichartz. Szegö limit theorems on the Sierpiński gasket. Preliminary report.

We use the existence of localized eigenfunctions of the Laplacian on the Sierpiński gasket (SG) to formulate and prove analogues of the strong Szegö limit theorem in this fractal setting. (Received August 15, 2008)