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Martin boundary and exit space on the Sierpinski gasket and other fractals.

We define a Markov chain on a discrete symbolic space corresponding to the Sierpinski gasket (SG) and show that its Martin boundary is homeomorphic to the SG, while the minimal Martin boundary can be identified with the three vertices of the SG. Moreover, we show that the harmonic functions coincide with the standard ones. We also consider generalizations to a larger class of p.c.f. fractals. This is a joint work with Ka-Sing Lau. (Received June 27, 2011)