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Robert L. Devaney* (bob@bu.edu), Math Dept., Boston University, 111 Cummington St.,
Boston, MA 02215. *Dynamic Classification of Sierpinski Curve Julia Sets.*

Sierpinski curves (sets that are homeomorphic to the Sierpinski carpet fractal) arise in a number of different ways as Julia sets for rational maps in the family $z^n + C/z^d$. These objects are quite rich from a geometric point of view. We shall show that the dynamical behavior on these sets is also quite rich. We shall give a complete classification of the dynamics on the “escape time” Sierpinski curve Julia sets in these families. This is joint work with Kevin Pilgrim. (Received November 09, 2009)