Daniel M. Look* (daniel.m.look@williams.edu), Department of Mathematics and Statistics, Williams College, Williamstown, MA 01267. *Imaginary Circle Inversions and Sierpinski Carpets*. Preliminary report.

We will begin by introducing multiple circle inversion, followed by an investigation into what it means for a circle to have complex radius in this situation. Finally, we will explore the dynamics and Julia sets of a two-parameter family of rational maps formed from multiple circle inversion where the circles have complex radii. (Received September 15, 2008)