Laminations and external angles for similarity pairs

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Barnsley-Harrington Mandelbrot set for similarity pairs has many interesting affinities with the "usual" Mandelbrot set. In particular, there is a "coding" of boundary points by data analogous to the "external angle" for points on the boundary of the usual Mandelbrot set. Instead of a single real number - an external angle - there is another parameter, a "scale factor", which can be between 1 and 2, and is 2 when the similarity pair is quasiconformally conjugate (as a conformal dynamical system on its limit set) to (the inverse of) a degree 2 rational map on its Julia set. As with the ordinary external angle, there is associated to the pair (angle, scale factor) a lamination of the circle which parameterizes cut points for the limit set.

This is a joint work with Alden Walker.