Of Polynomials, Bagels, and Teapots

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Sets of zeros of polynomials with restricted coefficients produce beautiful patterns with a rich fractal structure. As W. Thurston observed in 2011, similar patterns can be obtained by looking at the entropies of certain quadratic polynomials. We will explore the geometric structure of such fractal objects and how they are related, and what a teapot has to do with this.