Title: The topological differences between the Mandelbrot set and the tricorn

Abstract: We study the iteration of quadratic anti-polynomials $\bar{z}^2 + c$ and their connectedness locus, known as the tricorn. The topology of the tricorn differs vastly from that of the Mandelbrot set (the connectedness locus of quadratic polynomials); for example, the tricorn contains parabolic arcs, which are real-analytic arcs consisting of quasi-conformally equivalent parabolic parameters and there are bifurcations between hyperbolic components along parts of such arcs. Recently, Hubbard and Schleicher proved that the tricorn is not path-connected, confirming a conjecture of Milnor.

The goal of this talk is to prove the following results, which further elucidate the topological differences between these two parameter spaces.

1) Rational parameter rays at odd-periodic angles of the tricorn do not land at a single parameter, but accumulate on an arc of positive length in the parameter space (This is a joint work with Hiroyuki Inou).

2) The centers of the hyperbolic components are *not* equidistributed with respect to the harmonic measure of the tricorn.

Time permitting, we will outline some partial results towards the discontinuity of the straightening map between the baby tricorns and the original one.

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