1044-37-215 **John C. Mayer*** (mayer@math.uab.edu), Dept. of Mathematics, UAB, Birmingham, AL 35294-1170, and **Clinton P. Curry**. *Buried points in Julia sets.* Preliminary report.

The Julia set of a rational function (of degree ≥ 2) on the Riemann sphere is the fully invariant compact set on which the dynamics is chaotic. The Fatou set is the dynamically tame complement of the Julia set. When the union of the boundaries of the components of the Fatou set do not equal the Julia set, we say that there are *buried points* and that there is a nonempty *residual Julia set*. We provide an introduction to buried points, and list mostly topological questions about buried points in Julia sets. (Received September 02, 2008)