## 1046-30-882

Ross Flek and Linda Keen\* (linda.keen@lehman.cuny.edu), Dept of Math and Computer Science, Lehman College CUNY, Bedford Park Blvd, Bronx, NY 10468. *Boundaries of Bounded Fatou Components of Quadratic Maps.* 

In this talk we characterize those external rays that land on the bounded Fatou components of hyperbolic and parabolic quadratic maps. For those maps not in the main cardioid of the Mandelbrot set, we prove that these rays form a Cantor subset of the circle at infinity. Our techniques involve both the orbit portraits of Goldberg and Milnor that relate the dynamic and parameter planes and the Thurston theory of laminations for quadratic maps. This classification is important since it provides a way to characterize buried Julia sets of a class of degree two rational maps which are conjugate to self-matings of the above quadratics. (Received September 12, 2008)