1086-37-1921   **Suzanne Boyd*** (`sboyd@uwm.edu`), University of Wisconsin Milwaukee, Department of
Mathematical Sciences, PO Box 413, Milwaukee, WI 53201. *Baby Julia sets and combinatorial
models.* Preliminary report.

We will examine the dynamics of some maps from each of the following two families, including computing some Iterated Monodromy Group representations. Family (1) consists of 'Singularly perturbed rational maps', which are rational maps of the Riemann sphere of the form $R(z) = z^n + c + a/z^n$. Family (2) is 'Polynomial skew products of $\mathbf{C}^2$', which are endomorphisms of the form $F(z, w) = (p(z), q(z, w))$, where p and q are both monic of degree $d >= 2$.

We will see how certain classes of maps from each family have dynamics which incorporates the dynamics of two hyperbolic quadratic polynomials (thus we'll see baby Julia sets), and in the case of the rational maps of family (1), display the intriguing effects of this in parameter space. (Received September 24, 2012)