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Slices of the parameter space of cubic polynomials

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Abstract: We study slices of the parameter space of cubic polynomials, up to affine conjugacy, given by a fixed value of the multiplier at a non-repelling fixed point. In particular, we study the location of the main cubioid in this parameter space. The main cubioid is the set of affine conjugacy classes of complex cubic polynomials that have certain dynamical properties generalizing those of polynomials $z^2 + c$ for c in the filled main cardioid.