

Convergence of renormalizations and rigidity of multicritical circle maps

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A multicritical circle map is a smooth homeomorphism of the circle with several critical points of odd integer order. We prove exponential convergence of renormalizations for C^3 -smooth multicritical circle maps with the same combinatorics and with rotation numbers of bounded type. As a corollary, we obtain a $C^{1+\alpha}$ -rigidity theorem for such maps.

This is joint work with Michael Yampolsky.