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Title: Gevrey growth for the formally linearizable billiard, after Treschev

Treschev made the remarkable discovery that there exists formal power series describing a billiard with locally linearizable dynamics. We show that if the frequency for the linear dynamics is Diophanine, the Treschev example is $(1+ \alpha)$-Gevrey for some $\alpha > 0$. Our proof is based on a KAM-like iterative scheme. Hopefully, Our result sheds a light on the more important question of whether this example is convergent. This is a joint work with Qun Wang (University of Toronto).