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Abstracts of Short Communications and Posters

Section:

9. Ordinary Differential Equations and Dynamical Systems

1991 MS Classification: not given

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Flexibility and rigidity for $C^{1+\alpha}$ hyperbolic dynamics

There is a one-to-one correspondence between quasi-periodic sequences of reals generated by a matching condition, (Hölder, affine) laminations on solenoids, and $C^{1+\alpha}$ conjugacy classes of expanding maps of the circle (joint work with Dennis Sullivan). The last equivalence extends to C^{1+} codimension one hyperbolic maps on surfaces. If the holonomy is smoother than one plus the Hausdorff dimension of the invariant set along the stable and unstable leaves then the hyperbolic map is smooth conjugated to an affine model (joint work with David Rand).