Non-existence of affine models for proper codimension 1 hyperbolic attractors

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We prove that the stable holonomies of a proper codimension 1 attractor Λ for a C^r diffeomorphism f on a surface are not $C^{1+\theta}$ for θ grater than the Hausdorff dimension of the stable leaves of f intersected with Λ. To prove this result we show in particular that there are no affine diffeomorphisms with affine holonomies which are topologically conjugated to diffeomorphisms on surfaces with a proper codimension 1 attractor.

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