

1038-37-290

Walter Parry* (walter.parry@emich.edu), Department of Mathematics, Eastern Michigan University, Ypsilanti, MI 48197. *Lattès Maps and Finite Subdivision Rules*. Preliminary report.

The following results will be discussed. Virtually every analytic conjugacy class of Lattès maps has the following property. Every function $f : \widehat{\mathbf{C}} \rightarrow \widehat{\mathbf{C}}$ in the conjugacy class is the subdivision map of a finite subdivision rule with one tile type. The universal covering orbifold of f is \mathbf{C} . The tiling of the Riemann sphere $\widehat{\mathbf{C}}$ by the one tile lifts to a tiling of \mathbf{C} which is combinatorially equivalent to the standard tiling of the plane by regular hexagons except that barycenters are inserted in some edges. On the other hand, there exists a Lattès map which is not the subdivision map of a finite subdivision rule with one tile type, nor is it the subdivision map of a finite subdivision rule with two tile types and 1-skeleton in $\widehat{\mathbf{C}}$ a simple closed curve. (Received February 12, 2008)