1147-37-700 **Volodymyr Nekrashevych***, Department of Mathematics, TAMU, College Station, TX 778433368. *Orbispace uniformizations of sub-hyperbolic maps and their iterated monodromy groups.* Preliminary report.

The standard definition of the iterated monodromy group of a sub-hyperbolic complex rational function can be naturally reformulated in terms of the associated Thurston orbifold. Choosing different orbispace uniformization of the Julia set produces different iterated monodromy groups. These "exotic" iterated monodromy groups are bounded orbit equivalent to the classical one, and often have interesting group theoretic properties. For example, one can construct torsion groups by modifying the orbispace structure of the Julia sets of some polynomials. We will discuss algebraic and dynamical aspects of this construction, in particular in relation with the procedure of mating of polynomials. (Received January 28, 2019)

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