1038-30-65 **Sarah C. Koch*** (kochs@math.cornell.edu), Department of Mathematics, Malott Hall, Cornell University, Ithaca, NY 14850. *A new link between Teichmueller theory and complex dynamics.*

Inspired by Thurston's theorem of the characterization of rational maps, J. H. Hubbard posed the "twisted rabbit" problem. This problem was recently solved by L. Bartholdi and V. Nekrashevych using original techniques involving iterated monodromy groups. A key part of their solution contains the construction of a map on a certain moduli space. We discuss Thurston's theorem and present the "twisted rabbit" problem. We then generalize the construction of these Bartholdi Nekrashevych maps and discuss their dynamical significance. (Received January 25, 2008)