1127-37-384 **Gregory A. Kelsey*** (gkelsey@bellarmine.edu) and **Russell Lodge**. *Subhyperbolicity and twists of quadratic Thurston maps with four postcritical points.*

We extend the methods of Bartholdi-Nekrashevych's solution of the twisted rabbit problem from polynomials of degree two with four postcritical points to all such rational maps. Through specific choices of how we set up the self-similar machinery, we simplify the calculations of the action by twists. Showing these actions are subhyperbolic gives an algorithmic solution to the twisted rabbit problem for these non-polynomial maps and allows us to enumerate all quadratic Thurston maps with four postcritical points. This work is joint with R. Lodge. (Received February 07, 2017)