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Richard A. Litherland (lither@math.lsu.edu) and **Steven D. Wallace***
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Baton Rouge, LA 70803. *Surgery description of colored knots.*

The pair (K,r) consisting of a knot K and a surjective map r from the knot group onto a dihedral group is said to be a p -colored knot. Moskovich conjectured that for any odd prime p there are exactly p equivalence classes of p -colored knots up to surgery along unknots in the kernel of the coloring. We show that there are at most $2p$ equivalence

classes. This is a vast improvement upon the previous results by Moskovich for $p=3$, and 5 , with no upper bound given in general. T. Cochran, A. Gerges, and K. Orr, in “Dehn surgery equivalence relations of 3-manifolds”, define invariants of the surgery equivalence class of a closed 3-manifold M in the context of bordisms. By taking M to be 0-framed surgery of the 3- sphere along K we may define Moskovich’s colored untying invariant in the same way as the Cochran-Gerges-Orr invariants. This bordism definition of the colored untying invariant will be then used to establish the upper

bound. (Received September 28, 2007)