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**Tyrone Ghaswala** and **Rebecca Winarski\*** (winarskr@uwm.edu). *Lifting Homeomorphisms and Cyclic Branched Covers of the Sphere.*

Birman and Hilden ask: given finite branched cover  $X$  over  $S^2$ , does every homeomorphism of  $S^2$  lift to a homeomorphism of  $X$ ? For covers of degree 2, the answer is yes, but the answer is sometimes yes and sometimes no for higher degree covers. In joint work with Ghaswala, we completely answer the question for cyclic branched covers. When the answer is yes, there is an embedding of the mapping class group of  $S^2$  into a finite quotient of the mapping class group of  $X$ . (Received August 03, 2016)