

1030-37-173

Kamlesh Parwani*, Department of Mathematics, Eastern Illinois University, Charleston, IL 61920. *Smooth actions of mapping class groups on the circle.*

Thurston has shown that the mapping class group— $Mod(S)$ —of a surface with negative Euler characteristic and nonempty boundary has a C^0 effective (faithful) action on the circle. We prove that $Mod(S)$, where S has genus at least 4, has no effective C^1 actions on the circle. In other words, $Mod(S)$ is a subgroup of $Homeo(S^1)$ but not a subgroup of $Diff^1(S^1)$. (Received July 31, 2007)