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David Joyner and **Amy Ksir*** (ksir@usna.edu), Department of Mathematics, 572-C Holloway Rd., United States Naval Academy, Annapolis, MD 21402, and **Roger Vogeler**. *Group representations on some Riemann-Roch spaces of Hurwitz curves.*

Let $q > 1$ denote an integer relatively prime to 2, 3, 7 and for which $G = PSL(2, q)$ is a Hurwitz group for a smooth projective curve X defined over \mathbb{C} . We compute the G -module structure of the Riemann-Roch space $L(D)$, where D is an invariant non-special divisor on the X . This depends on a computation of the ramification module, which we give explicitly. In particular, we obtain the decomposition of $H^1(X, \mathbb{C})$ as a G -module. (Received February 21, 2006)