Character covering number of $\mathrm{PSL}_2(q)$

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Abstract. For a group G and a character χ of G, let $c(\chi)$ denote the set of all irreducible characters of G, occurring in χ. The character covering number of G is defined as the least n such that $c(\chi^n) = \mathrm{Irr}(G)$, for all faithful irreducible χ. In this article, we compute the character covering number of $\mathrm{PSL}_2(q)$ for all $q \geq 8$.

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