ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

2. Algebra

1991 MS Classification: 20C15, 20C33
Darafsheh, M. R., University of Tehran, Iran

The character table of the group $GL_2(q)$ when extended by a certain group of order two

Let G denote either of the groups $GL_2(q)$ or $SL_2(1q)$. Then $\theta : G \to G$ given by $\theta(A) = (A^{-1})^t$, where A^t denotes the transpose of the matrix A, is an automorphism of G. Therefore we may form the group $G.\langle\theta\rangle$ which is the split extension of the group G by the cyclic group $\langle\theta\rangle$ of order 2. Our aim in this paper is to find the complex irreducible character table of $G.\langle\theta\rangle$.