1025-05-136

Alessandro Montinaro* (alessandro.montinaro@unile.it), Universita' Degli Studi di Lecce, Dipartimento di matematica, Via per Arnesano, 73100 Lecce, Lecce, Italy. The general structure of the projective planes admitting PSL(2,q) as a collineation group.

Projective planes of order n admitting PSL(2,q), q > 3, as collineation group are investigated for $n <= q^2$. As a consequence, affine planes of order n admitting PSL(2,q), q > 3, as collineation group are classified for $n < q^2$ and for (q,n) different from (5,16). A generalization of the Foulser-Johnson theorem is also obtained. (Received January 20, 2007)