

Noncoprime fixed point free action of a nilpotent group

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Let A and G be finite groups with A acting on G by automorphisms. We have been carrying on research to understand the influence of this action on the structures of both G and A , in some collaborated works over the years. The action is said to be coprime if G and A have coprime orders. The existence of nice conditions which are valid in case of a coprime action made it almost traditional to assume that the action is coprime. With this talk I aim to give an account of the considerable progress made in the case of a noncoprime action in the literature, and also present some recent results related to a noncoprime fixed point free action of a nilpotent group.