The group ring $\mathbb{Z}G$ of a finite group $G$ has only trivial central units if all elements of the center of the units of $\mathbb{Z}G$ already belong to $G$. It turned out that this is equivalent to the group-theoretical concept of an inverse semi-rational group, as introduced by D. Chillag and S. Dolfi [CD10]. Using this interplay between group-theory and the theory of orders, new results have been obtained. In this talk we will discuss this connection and survey recent results [BMP16, Mah16, Bäc17].

References


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