

On the CI-property for balanced configurations

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Let G be a finite group. A Cayley object is a relational structure with underlying set G which is invariant under all right translations $x \mapsto xg$, $x, g \in G$. Given a class \mathcal{K} of Cayley objects of G , the group G is said to satisfy the CI-property for \mathcal{K} if for any two isomorphic Cayley objects in \mathcal{K} , there is an isomorphism between them, which is at the same time an automorphism of the group G . The question whether a given group G satisfies the CI-property for a given class \mathcal{K} of Cayley objects has been studied under various choices of G and \mathcal{K} . In this talk, we focus our attention to the class of balanced configurations where we show that every cyclic group satisfy the CI-property.