Rings & Wings

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Title: Groups for Which Subgroup Isomorphisms Extend to Automorphisms

Abstract: Let G be an abelian group. Then G is called a T_1' *group* provided that for every pair of isomorphic subgroups H and K of G, and every isomorphism $f : H \to K$, f can be extended to an automorphism of G. Let us call G a *weakly* T_1' *group* if for any elements a and b of G of the same order, there is an automorphism $f : G \to G$ such that $f(a) = b$. In this talk, we determine both classes of groups, correcting a result in the literature. We then study several analogues for rings. The topic of this talk was inspired by a question of G. Abrams.