

Order isomorphisms of operator intervals

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Abstract

A general theory of order isomorphisms of operator intervals will be presented. It unifies and extends several known results, among others Ludwig's famous description of ortho-order automorphisms of effect algebras and Molnár's characterization of bijective order preserving maps on bounded observables. The optimality of the presented theorems can be demonstrated by using Löwner's theory of operator monotone functions.