A short note on subinterval algebras

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Abstract

In the last years the possibility to define the same algebraic structure on a non-empty interval in bounded ordered algebras were intensively studied. We provide an overview of the recent progress in this field for many types of so called quantum structures. For example, the last contribution is by I. Chajda and J. Kühr, who showed (in not yet published paper) the possibility to introduce it even for partial algebras, in particular for pseudo-effect algebras. Besides an historical overview we will mostly consider bounded, integral, residuated lattices and derived algebras. We show that divisibility condition is not necessary for defining the subinterval algebra on a given non-empty interval. Moreover, we investigate some properties of basic algebraic constructions with respect to subinterval algebras.

References

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