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**Proper effect algebras admitting no states.** (English) Zbl 0989.81003  
[Int. J. Theor. Phys. 40, No. 10, 1683-1691 \(2001\)](#).

Summary: We show that there is even a finite proper effect algebra admitting no states. Further, every lattice effect algebra with an ordering set of valuations is an MV effect algebra (consequently it can be organized into an MV algebra). An example of a regular effect algebra admitting no ordering set of states is given. We prove that an Archimedean atomic lattice effect algebra is an MV effect algebra iff it admits an ordering set of valuations. Finally we show that every nonmodular complete effect algebra with trivial center admits no order-continuous valuations.

**MSC:**

[81P10](#) Logical foundations of quantum mechanics; quantum logic (quantum-theoretic aspects)

Cited in **18** Documents

[06C15](#) Complemented lattices, orthocomplemented lattices and posets

**Keywords:**

[Archimedean atomic lattice effect algebra](#); [ordering set of valuations](#); [nonmodular complete effect algebra](#)

**Full Text:** [DOI](#)