

**Giuntini, Roberto**

**Quantum MV-algebras and commutativity.** (English) Zbl 0906.03062

Int. J. Theor. Phys. 37, No. 1, 65-74 (1998).

In a previous paper, the author introduced quantum MV-algebras as a generalization of MV-algebras [Stud. Logica 56, 393-417 (1996; [Zbl 0854.03057](#))]. In this paper he introduces a notion of commutativity as well as that of the center for such algebras, showing that the center of a quantum MV-algebra is an MV-algebra. It is also shown that the center of the quantum MV-algebra of all effects on a Hilbert space is trivial.

Reviewer: [Hirokazu Nishimura \(Tsukuba\)](#)

**MSC:**

[03G12](#) Quantum logic

[06D30](#) De Morgan algebras, Łukasiewicz algebras (lattice-theoretic aspects)

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

Cited in 4 Documents

**Keywords:**

quantum MV-algebras; commutativity; center

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