

**Jakubík, Ján**

**Maximal completion of a pseudo MV-algebra.** (English) Zbl 1108.06006  
[Arch. Math., Brno 39, No. 2, 141-161 \(2003\)](#).

The paper is concerned with the so-called pseudo MV-algebras and their (maximal) completions. The author begins with a brief introduction to the subject and he also recalls the basic definitions together with a result of A. Dvurečenskij concerning the representation of pseudo MV-algebras via lattice-ordered groups.

The author uses this result for the construction of a (maximal) completion of a pseudo MV-algebra via the corresponding representation. To do this work, he first gives the reader deeper insight to the maximal completion of a lattice-ordered group and some other results on this completion.

After this preparation phase he established the desired construction of the (maximal) completion and he also gives another characterization of the elements of the maximal completion. As a byproduct, he proves that the maximal completion of a strong subdirect product of MV-algebras is isomorphic to the direct product of their maximal completions.

The exposition of the paper is clear and the readability is also very good. The author presents nice and original results.

Reviewer: [Jan Paseka \(Brno\)](#)

**MSC:**

[06D35](#) MV-algebras  
[06B23](#) Complete lattices, completions

**Keywords:**

[b-atomicity](#); [direct product](#)

**Full Text:** [EuDML](#) [EMIS](#)