

Chajda, I.; Eigenthaler, G.

A remark on congruence kernels in complemented lattices and pseudocomplemented semilattices. (English) [Zbl 0940.06009](#)

Chajda, I. (ed.) et al., Contributions to general algebra 11. Proceedings of the Olomouc workshop '98 on general algebra, "56. Arbeitstagung Allgemeine Algebra", Olomouc, Czech Republic, June 12-14, 1998 and of the summer school '98 on universal algebra and ordered sets, Velké Karlovice, Czech Republic, August 31-September 5, 1998. Klagenfurt: Verlag Johannes Heyn. 55-58 (1999).

Let $\mathfrak{L} = (L, \wedge, \vee, 0, 1)$ be a complemented lattice. Suppose that $C \subseteq L$ is a congruence class of some $\theta \in \text{Con}L$. It is proved (Theorem 2.1) that $[0]\theta = \{a \in L \mid c \wedge a = 0 \text{ and } c \vee a \in C \text{ for some } c \in C\}$. Thus for every $\theta \in \text{Con}\mathfrak{L}$ its kernel is determined by every class of θ . A similar theorem is proved for pseudocomplemented semilattices.

For the entire collection see [\[Zbl 0914.00059\]](#).

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MSC:

[06C15](#) Complemented lattices, orthocomplemented lattices and posets
[06B10](#) Lattice ideals, congruence relations
[06A12](#) Semilattices

Cited in **1** Document

Keywords:

[pseudocomplemented semilattice](#); [complemented lattice](#); [congruence](#); [kernel](#)