

# VARIETIES WITH DEFINABLE FACTOR CONGRUENCES AND BFC

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ABSTRACT. A variety  $\mathcal{V}$  has *Definable Factor Congruences* (DFC) if for all  $A, B \in \mathcal{V}$  the kernel congruence of the canonical projection  $A \times B \rightarrow A$  can be first-order defined in terms of the *central elements* [1996] associated to that congruence. We give an explicit definition and prove that for every variety  $\mathcal{V}$  where proper subalgebras are always nontrivial,  $\mathcal{V}$  has DFC if and only if  $\mathcal{V}$  has Boolean Factor Congruences (see [1990b],[1990w], [1987]).

## REFERENCES

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