

On congruence lattices of some lattices

MIROSLAV PLOŠČICA

Mathematical Institute, Slovak Academy of Sciences, KOŠICE
ploščica@saske.sk

For a class \mathcal{K} of algebras let $\text{Con } \mathcal{K}$ denote the class of all lattices isomorphic to $\text{Con } A$ (the congruence lattice of A) for some $A \in \mathcal{K}$. The *critical point* between classes \mathcal{K} and \mathcal{L} is the number of compact elements of the smallest lattice in $\text{Con } \mathcal{K} \setminus \text{Con } \mathcal{L}$ (or ∞ if no such lattice exists). We discuss the critical points for some varieties of lattices.