

# On centralizer clones

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Let  $O_A$  denote the set of all finitary operations on a set  $A$ . A clone of operations  $C \leq O_A$  is called *centralizer clone* if there is a set  $F \subseteq O_A$ , such that  $C$  consists of all operations which commute with every operation in  $F$ . Such centralizers can be characterized also as so-called *primitive positive clones*, defined by closure operations (expressible via primitive positive first order formulas) used for relational clones. In case of finite  $A$  there are only finitely many centralizer clones (see [1]) although there are continuum many clones (for  $|A| \geq 3$ ).

In the talk some old and new results as well as open problems about centralizer clones are reported.

## REFERENCES

- [1] S. BURRIS AND R. WILLARD, *Finitely many primitive positive clones*. Proc. Amer. Math. Soc. 101(3), (1987), 427–430.