

THE LATTICE OF VARIETIES OF FIBERED AUTOMATA

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Abstract

The class of all fibered automata is a variety of two-sorted algebras. This paper provides a full description of the lattice of varieties of fibered automata.

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REFERENCES

- [1] G. Birkhoff and J.D. Lipson, *Heterogenous algebras*, J. Comb. Th. **8** (1970), 115–133.
- [2] J.A. Goguen and J. Meseguer, *Completeness of many-sorted equational logic*, Houston J. Math. **11** (1985), 307–334.
- [3] H. Lugowski, *Grundzüge der Universalen Algebra*, Teuber, Leipzig 1976.
- [4] I. Rosenberg, *A classification of universal algebras by infinitary relations*, Algebra Universalis **1** (1972), 350–353.
- [5] J.D.H. Smith, *Continued fractions, fibered automata, and a theorem of Rosenberg*, Multiple-Valued Logic **8** (2002), 503–515.

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