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 fibred 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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