

THE LATTICE OF VARIETIES OF FIBERED AUTOMATA

ANNA MUĆKA

*Faculty of Mathematics and Information Sciences,
Warsaw University of Technology
00-661 Warsaw, Poland*

e-mail: aniam@b4.pl

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.

Keywords: fibered automata, many-sorted algebras, varieties of many-sorted algebras, lattice of varieties.

2000 Mathematics Subject Classification: 08B15, 08A68, 68Q70.

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.

Received 6 April 2006

Revised 1 July 2006