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The structure and development of mathematical theories. (English) Zbl 0746.03004
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Summary: On the basis of a structural-naming reconstruction of scientific knowledge we give a description of the main subsystems of mathematical theories. The role of the theory of named sets for the exact analysis of their components is given. For the case of set theory we consider also some dynamic aspects.

MSC:

- 03A05 Philosophical and critical aspects of logic and foundations
- 00A30 Philosophy of mathematics
- 18C10 Theories (e.g., algebraic theories), structure, and semantics
- 18A15 Foundations, relations to logic and deductive systems
- 18B05 Categories of sets, characterizations
- 03-03 History of mathematical logic and foundations

Keywords:

structural-naming reconstruction of scientific knowledge; subsystems of mathematical theories; theory of named sets; set theory