MR644507 (83b:03068) 03F50 (00A25 03A05)

Yessenin-Volpin, A. S.

About infinity, finiteness and finitization (in connection with the foundations of mathematics).

Constructive mathematics (Las Cruces, N.M., 1980), pp. 274–313, *Lecture Notes in Math.*, 873, *Springer, Berlin-New York*, 1981.

This very demanding sketch of some aspects of the author's so-called antitraditional program for the foundations of mathematics presupposes some prior familiarity with the author's work [see, e.g., *Intuitionism and proof theory* (Buffalo, N.Y., 1968), pp. 3–45, North-Holland, Amsterdam, 1970; MR0295876 (45 #4938)]. But the present paper offers some insight into the radical revisions of foundational work proposed by the author. For those with some familiarity with the author's work this paper provides sketches of his recent thinking on the structure of proofs, construction of models, and consistency proofs, of a certain type, for ZF set theory.

The paper by D. Isles in the same volume [MR0644498 (83b:03067)above] provides some help for those who have no prior acquaintance with the author's work.

{For the entire collection see MR0644489 (82m:03003)}

Reviewed by *Charles F. Kielkopf*