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Denis R. Hirschfeldt\* (drh@math.uchicago.edu), Department of Mathematics, University of Chicago, 5734 S. University Ave., Chicago, IL 60637, and Richard A. Shore and Theodore A. Slaman. Computability-theoretic and proof-theoretic aspects of the atomic model theorem. Preliminary report.

The atomic model theorem states that every countable complete atomic theory has a countable atomic model. We discuss the strength of this and related principles from the points of view of computability theory and reverse mathematics. (Received February 12, 2006)