

Bibliography: Mathematical Frameworks

Foundational Frameworks

Set Theory

Fraenkel, Abraham A., Yehoshua Bar-Hillel, and Azriel Levy. *Foundations of Set Theory*. 2nd ed. Amsterdam: North-Holland, 1973.

Halmos, Paul R. *Naive Set Theory*. New York: Springer-Verlag, 1974.

Jech, Thomas. *Set Theory: The Third Millennium Edition*. Berlin: Springer, 2003.

Kunen, Kenneth. *Set Theory: An Introduction to Independence Proofs*. Amsterdam: North-Holland, 1980.

Zermelo, Ernst. "Untersuchungen über die Grundlagen der Mengenlehre I." *Mathematische Annalen* 65, no. 2 (1908): 261-281.

Type Theory

Church, Alonzo. "A Formulation of the Simple Theory of Types." *Journal of Symbolic Logic* 5, no. 2 (1940): 56-68.

Martin-Löf, Per. *Intuitionistic Type Theory*. Naples: Bibliopolis, 1984.

Martin-Löf, Per. "Constructive Mathematics and Computer Programming." In *Logic, Methodology and Philosophy of Science VI*, edited by L. Jonathan Cohen et al., 153-175. Amsterdam: North-Holland, 1982.

Nordström, Bengt, Kent Petersson, and Jan M. Smith. *Programming in Martin-Löf's Type Theory: An Introduction*. Oxford: Oxford University Press, 1990.

Russell, Bertrand. "Mathematical Logic as Based on the Theory of Types." *American Journal of Mathematics* 30, no. 3 (1908): 222-262.

Homotopy Type Theory

Awodey, Steve. "Homotopy Type Theory and Voevodsky's Univalent Foundations." *Bulletin of the American Mathematical Society* 51, no. 4 (2014): 597-648.

The Univalent Foundations Program. *Homotopy Type Theory: Univalent Foundations of Mathematics*. Princeton: Institute for Advanced Study, 2013. <https://homotopytypetheory.org/book/>

Voevodsky, Vladimir. "An Experimental Library of Formalized Mathematics Based on the Univalent Foundations." *Mathematical Structures in Computer Science* 25, no. 5 (2015): 1278-1294.

Voevodsky, Vladimir. "Univalent Foundations of Mathematics." Lecture at WKshop on Logical and Semantic Frameworks, with Applications (LSFA 2010), 2010.

Unifying Frameworks

Category Theory

Awodey, Steve. *Category Theory*. 2nd ed. Oxford: Oxford University Press, 2010.

Eilenberg, Samuel, and Saunders Mac Lane. "General Theory of Natural Equivalences." *Transactions of the American Mathematical Society* 58, no. 2