

Philosophy of Mathematics Book List (v.6)

A. Introductory Texts

- Bostock, D. *Philosophy of Mathematics: An Introduction* (2009) *
- Brown, J. R. *Philosophy of Mathematics*, 2nded (2008)
- Çevik, A. *Philosophy of Mathematics: Classic and Contemporary Studies* (2022)
- Colyvan, M. *An Introduction to the Philosophy of Mathematics* (2011)
- Friend, M. *Introducing Philosophy of Mathematics* (2007)
- George, A. and D. Velleman *Philosophies of Mathematics* (2002)
- Hamkins, J. D. *Lectures on the Philosophy of Mathematics* (2020)
- Körner, S. *The Philosophy of Mathematics: An Introductory Essay* (1960) #
- Linnebo, Ø. *Philosophy of Mathematics* (2017) %
- Ravn, O. and O. Skovsmose *Connecting Humans to Equations* (2019)
- Shapiro, S. *Thinking about mathematics: The philosophy of mathematics* (2000)*

* *Recommended as course texts*

Old but good

% *Good, philosophy oriented*

B. General Collections of Essays

- Agazzi, E. and G. Darvos *Philosophy of Mathematics Today* (1997)
- Aspray, W. and P. Kitcher *History and Philosophy of Modern Mathematics* (1988)
- Benacerraf, P. and H. Putnam *Philosophy of Mathematics: Selected Readings*, 2nded (1983) *
- Dybjer, P. et al *Epistemology versus Ontology* (2012) *
- Ewald, W. *From Kant to Hilbert: A Source Book in the Foundations of Mathematics*, Vols. 1&2 (1996) *
- Ferreiros, J and J. J. Gray *The Architecture of Modern Mathematics* (2006)
- George, A. *Mathematics and Mind* (1994)
- Hart, W. *The Philosophy of Mathematics* (1996) *
- Hersch, R. *18 Unconventional Essays on the Nature of Mathematics* (2006)
- Irvine, A.D. *Philosophy of Mathematics* (2009) *
- Landry, E. *Categories for the Working Mathematician* (2017)
- Leng, M., et al *Mathematical Knowledge* (2007)
- Lindström, S., et al *Logicism, Intuitionism and Formalism: What has become of them?* (2009) *
- Mancosu, P. *The Philosophy of Mathematical Practice* (2008)
- Marcus, R. and M. McEvoy *An Historical Introduction to the Philosophy of Mathematics: A Reader* (2016)
- Shapiro, S. *The Oxford Handbook of the Philosophy of Mathematics and Logic* (2005) *
- Schirn, M. *The Philosophy of Mathematics Today* (1998)
- Tymoczko, T. *New Directions in the Philosophy of Mathematics* (1985)
- Van Heijenoort, J. *From Frege to Gödel: A Source Book in Mathematical Logic* (1967)

* *Recommended*

C. Other Books and Collections

- Aristotle *The Basic Works*, ed. McKeon, R. (2001)
- Awodey, S. *Category Theory* (2009)
- Ayer, A. *Language, Truth and Logic* (1947)
- Balaguer, M. *Platonism and Anti-Platonism in Mathematics* (1998)
- Bishop, E. and D. Bridges *Constructive Analysis* (1985)
- Bostock, D. 'Aristotle's Philosophy of Mathematics' in *Oxford Handbook of Aristotle* (2012)
- Brittan, G. *Kant's Theory of Science* (1978)
- Burgess, J. and G. Rosen *A Subject with No Object* (1997)
- Carey, S. *The Origin of Concepts* (2009)
- Clark, Bob *Wittgenstein, Mathematics and World* (2017)
- Clark-Doane, J. *Mathematics and Metaphilosophy*, new edition (2022)
- Connes, A., et al *Triangle of Thoughts* (2000)
- Corfield, D. *Towards a Philosophy of Real Mathematics* (2004)
- Curry, H. *Outlines of a Formalist Philosophy of Mathematics* (1951)
- Davis, P and R. Hersch *The Mathematical Experience* (1981)
- Dedekind, R. *Essays on the Theory of Numbers* (1963)
- Dehaene, S. *The Number Sense*, 2nd ed (2011)
- Dehaene, S. and E. Brannon *Space, Time and Number in the Brain* (2011)
- Demopoulos, W. *Frege's Philosophy of Mathematics* (1997)
- Diamond, C. *Wittgenstein's Lectures on the Foundations of Mathematics, Cambridge 1939* (1975)
- Dummett, M. *Elements of Intuitionism* (1977)
- Dummett, M. *Frege: Philosophy of Mathematics* (1995)
- Ferreirós, J. *Mathematical Knowledge and the Interplay of Practices* (2016)
- Field, H. *Science without numbers: a defense of nominalism* (1980)
- Field, H. *Realism, Mathematics & Modality* (1989)
- Floyd, J. *Wittgenstein's Philosophy of Mathematics* (2021)
- Frege, G. *The Foundations of Arithmetic* (1959)
- Franklin, J. *The Aristotelian Realist Philosophy of Mathematics* (2014)
- Franks, C. *The Autonomy of Mathematical Knowledge: Hilbert's Program Revisited* (2009)
- Giaquinto, M. *The Search for Certainty: A Philosophical Account of the Foundations of Mathematics* (2002)
- Hahn, H. *Empiricism, Logic and Mathematics: Philosophical Essays* (1980)
- Hellman, G. and S. Shapiro *Mathematical Structuralism* (2019)
- Jost, J. *Bernhard Riemann: On the Hypotheses Which Lie at the Bases of Geometry* (2016)
- Kant, I. *Critic of Pure Reason*, trans. Guyer, P and A. Wood (1998)
- Kant, I. *Prolegomena to Any Future Metaphysics*, trans. G. Hatfield (2004)
- Kitcher, P. *The Nature of Mathematical Knowledge* (1984)
- Koetsier, T. *Lakatos' Philosophy of Mathematics* (1991)
- Lakatos, I. *Proofs and Refutations: The Logic of Mathematical Discovery* (1976)
- Lakatos, I. *Mathematics, science and epistemology* (1978)
- Landry, E. *Plato was Not a Mathematical Platonist* (2023)
- Lawvere, F.W. and R. Rosebrugh *Sets for Mathematics* (2003)
- Leng, M. *Mathematics and Reality* (2010)
- Mancosu, P. *Philosophy of Mathematics and Mathematical Practice in the 17th Century* (1996)
- Mancosu, P. *Abstraction and Infinity* (2016)

Mac Lane, S. *Mathematics: Form and Function* (1986)

Maddy, P. *Realism in Mathematics* (1990)

Maddy, P. *Naturalism in Mathematics* (1997)

Manin, Yu. *Mathematics and Physics* (1981)

Manin, Yu. *Mathematics as Metaphor* (2007)

Martin-Löf, P. *Intuitionistic Type Theory* (1984)

Martin-Löf, P. *Constructive Type Theory* (Tehran Lectures) (2008)

McKeon, R. (editor) *The Basic Works of Aristotle* (1941)

McLarty, C. *Elementary Categories, Elementary Toposes* (1995)

Parsons, C. *Mathematics in Philosophy: Selected Essays* (1983)

Pesic, P. *Beyond Geometry* (2007)

Pincock, C. *Mathematics and Explanation* (2023)

Plato *Collected Dialogues*, ed. Hamilton, E. and H. Cairns (1963)

Poincaré, H. *The Value of Science (Essential Writings)* (2001)

Posy, C. *Kant's Philosophy of Mathematics* (1992)

Posy, C. *Mathematical Intuitionism* (2020)

Ramsey, F. The Foundations of Mathematics, in *Philosophical Papers*, ed. D. Mellor (1990)

Rashed, R. *The Development of Arabic Mathematics: Between Arithmetic and Algebra* (1994)

Rashed, R. *Classical Mathematics from Al-Khwarizmi to Descartes* (2005)

Rashed, R. and B. Vahabzadeh *Omar Khayyam, the Mathematician* (2000)

Roubach, M. *Phenomenology and Mathematics* (2023)

Russell, B. *The Principles of Mathematics* (1903)

Russell, B. and A. N. Whitehead *Principia Mathematica*, 3 volumes (1910-13), (1925-27), (1997, abridged)

Sieg, W. *Hilbert's Programs and Beyond* (2013)

Sigmund, K. *The Waltz of Reason: The Entanglement of Mathematics and Philosophy* (2023)

Steiner, M. *Mathematical Knowledge* (1975)

Steiner, M. *The Applicability of Mathematics as a Philosophical Problem* (1999)

Stillwell, J. *Roads to Infinity* (2011)

Stillwell, J. *A Concise History of Mathematics for Philosophers* (2019)

Tietzen, R. *Mathematical Intuition: Phenomenology and Mathematical Knowledge* (1989)

Tiles, M. *Mathematics and the Image of Reason* (1991)

Troelstra, A.S. and D. van Dalen *Constructivism in Mathematics, Vol.1* (1988)

Univalent Foundations Program *Homotopy Type Theory: Univalent Foundations of Mathematics* (2013), <http://homotopytypetheory.org/book>

Van Dalen, D. *Brouwer's Cambridge lectures on intuitionism* (1981)

Wagner, R. *Making and Breaking Mathematical Sense: Histories and Philosophies of Mathematical Practice* (2017)

Wang, H. *From Mathematics to Philosophy* (1974)

Wedberg, A. *Plato's Philosophy of Mathematics* (1955)

Weyl, H. *Philosophy of Mathematics and Natural Science* (1949)

Weyl, H. *The Continuum* (1987)

Wilson, M. *Innovation and Certainty* (2020)

Wittgenstein, L. *Remarks on the Foundations of Mathematics* (1956)