

## REFERENCES

- Ac67 R. Ackermann, *An introduction to many-valued logics*, Routledge, 1967.
- Ad14 J.H. Adams, *Innovation in mathematics*, [www.jimhadams.com](http://www.jimhadams.com), 2014; also on the free eBook site The Assayer.
- Ad15 J.H. Adams, *Superexponential algebra*, vols. 1, 2 & 3, [www.jimhadams.com](http://www.jimhadams.com), 2015; also on the free eBook site The Assayer.
- Ar64 E. Artin, *The gamma function*, tr. M. Butler, Holt, Rinehart and Winston, 1964.
- Bh00 M. Bhargava, *The factorial function and generalizations*. The American Mathematical Monthly **107** (9): 783–799. doi:10.2307/2695734, 2000.
- Bh04 M. Bhargava, *Higher composition laws I: a new view on Gauss composition, and quadratic generalization*. The Annals of Mathematics **159**: 217–250. doi:10.4007/annals.2004.159.217, 2004.
- Bh04 M. Bhargava, *Higher composition laws II: on cubic analogues of Gauss composition*. The Annals of Mathematics **159** (2): 865–886. doi:10.4007/annals.2004.159.865, 2004.
- Bh04 M. Bhargava, *Higher composition laws III: the parameterization of quartic rings*. The Annals of Mathematics **159** (3): 1329–1360. doi:10.4007/annals.2004.159.1329, 2004.
- Bh05 M. Bhargava, *The density of discriminants of quartic rings and fields*. The Annals of Mathematics **162**: 1031–1063. doi:10.4007/annals.2005.162.1031, 2005.
- Bh08 M. Bhargava, *Higher composition laws IV: the parameterization of quintic rings*. The Annals of Mathematics **167**: 53–94. doi:10.4007/annals.2008.167.53, 2008.
- Bh10 M. Bhargava, *The density of discriminants of quintic rings and fields*. The Annals of Mathematics **172**: 1559–1591. doi:10.4007/annals.2010.172.1559, 2010.
- BM69 G. Birkhoff and S. Mac Lane, *A survey of modern algebra*, 3<sup>rd</sup> edn., Macmillan, 1969.
- Bo73 N. Bourbaki, *Algebra I*, Hermann, 1973.
- Bu89 D.M. Burton, *Elementary Number Theory*, Wm.C. Brown, 1989.
- 1CG00 J.H. Conway and R.K. Guy, *The book of numbers*, Copernicus books, Springer, 2000.
- 2Co78 J.B. Conway, *Functions of one complex variable*, 2<sup>nd</sup> edn., Springer, 1978.
- 2Co95 J.B. Conway, *Functions of one complex variable II*, Springer, 1995.
- Da82 H. Davenport, *The higher arithmetic*, Cambridge U. P., 1982.
- 1De02 A. Deitmar. *A first course in harmonic analysis*, Springer, 2002.
- 2De77 P. Deligne et al., *Cohomology étale*, Séminaire de Géométrie Algébrique du Bois-Marie SGA 4½, Springer, 1977.
- 3De65 J. Dettman. *Applied complex variables*, Macmillan, 1965.
- DERZ97 J-M Deshouilles, G.W. Effinger, H.J.J. te Riele, D. Zinoviev, *A complete Vinogradov 3-primes theorem under the Riemann hypothesis*, Electronic Research Announcements of the AMS 3(15): 99-104 doi: 10 1090/S1079-67632-07-00031-0. MR 1469323, 1997.
- DS05 F. Diamond and J. Shurman, *A first course on modular forms*, Springer, 2005.
- Ed74 H.M. Edwards, *Riemann's zeta function*, Academic Press, 1974.
- Eb91 Ebbinghaus et al., *Numbers*, Springer, 1991.

- FI92 H.M. Farkas and I Kra, *Riemann surfaces*, Springer, 1992.
- Fr73 F.G. Frobenius, *Gesammelte Abhandlungen*, vols. 1, 2 and 3, Springer, 1973.
- Ge75 S.S. Gelbart, *Automorphic forms on adèle groups*, Ann Math Studies 83, Princeton U.P., 1975.
- Ge76 S.S. Gelbart, *Weil's representation and the spectrum of the metaplectic group*, Lecture notes in mathematics, Springer, 1976.
- Gj1913 B. Renschuch, H. Roloff, and G.G. Rasputin, *Contributions to constructive polynomial ideal theory XXIII: forgotten works of Leningrad mathematician N.M. Gjunter on polynomial ideal theory*, [www.sigsam.org/bulletin/articles/144/roloff.pdf](http://www.sigsam.org/bulletin/articles/144/roloff.pdf).
- Gr49 W. Gröbner, *Moderne algebraische Geometrie*, Springer, 1949.
- 1He33 E. Hecke, *Algebraische Zahlen*, 1933.
- 2He12 H. Helfgott, *Minor arcs for Goldbach's problem*, arXiv 1205.5252, 2012
- 2He13a H. Helfgott, *Major arcs for Goldbach's problem*, arXiv 1305.2897, 2013
- 2He13b H. Helfgott, *The ternary Goldbach conjecture is true*, arXiv 1312.7748, 2013
- HKT08 J.W.P. Hirschfeld, G. Korchmáros and F. Torres, *Algebraic curves over a finite field*, Princeton Series in Applied Mathematics, 2008.
- HW79 G.H. Hardy and E.M. Wright, *An introduction to the theory of numbers*, 5<sup>th</sup> edn., Oxford, Clarendon Press, 1979.
- Je1859 G.B. Jerrard, *An essay on the resolution of equations*, Taylor & Francis, 1859.
- 1JL70 H. Jacquet and R.P. Langlands, *Automorphic forms on GL(2)*, Springer, 1973.
- 1La27 E. Landau, *Vorlesungen über Zahlentheorie*, New York, Chelsea, 1927. Second edition translated into English by J. E. Goodman, Providence RH, Chelsea, 1958.
- 2La80 R.P. Langlands, *Base change for GL(2)*, Springer, 1973.
- 1Ma1886 G.B. Mathews, *Theory of numbers*, 1886, reprinted Chelsea Publishing.
- 1Ma30 G.B. Mathews, *Algebraic equations*, Cambridge U.P., 1930.
- MB79 S. Mac Lane and G. Birkhoff, *Algebra*, 2<sup>nd</sup> edn., Macmillan, 1979.
- Ne1892 E. Netto, *Theory of substitutions*, Chelsea reprint.
- NZ60 I. Niven and H.S. Zuckerman, *An introduction to the theory of numbers*, John Wiley and Sons, 1960.
- Pi22 É. Picard, *Traité d'analyse*, vol. 1, 3<sup>rd</sup> edn., 1922.
- Pi25 É. Picard, *Traité d'analyse*, vol. 2, 3<sup>rd</sup> edn., 1925.
- Po85 H. Poincaré, *Papers on Fuchsian functions*, (tr.), Springer, 1985.
- Re89 R. Remmert, *Theory of complex functions*, Springer, 1989.
- Ri1861 G.F.B. Riemann, *Fragment aus der Analysis Situs*, Gesammelte Mathematische Werke, 1861. Also *Grundlagen für eine allgemeine Theorie der Functionen einer veränderlichen complexen Grosse*, Werke, 2nd ed., 3 – 48, 1851.
- Ro10 J. Rotman, *Advanced modern algebra*, 2<sup>nd</sup> edn., AMS, 2010.
- Se03 J-P. Serre, *Oeuvres*, vols. 1, 2, 3 and 4, Springer 2003.
- Ta07 T. Tao, *Hilbert's Nullstellensatz*, <http://terrytao.wordpress.com/2007/11/26/hilberts-nullstellensatz/>
- Ts1683 Tschirnhaus, *Acta Eruditorum*, 1683.
- Uh01 F. Uhlig, *Transform linear algebra*, Pearson, 2001.
- 1We1895 H.M. Weber, *Lehrbuch der Algebra*, AMS Chelsea, vols. 1, 2 & 3, 1981.
- 2We79 A. Weil, *Oeuvres scientifiques*, vol. 1, p.127-128, 1979.