

Bibliography

- [1] E. CUTHILL and J. MCKEE. Reducing the bandwidth of sparse symmetric matrices. In *Proceedings of the 1969 24th national conference*, pages 157–172, 1969.
- [2] A. ERNST and G. STOLTZ. *Calcul Scientifique*. Lecture notes at École des Ponts, 2014.
URL: <https://cermics.enpc.fr/cours/CS/poly.pdf>.
- [3] D. GOLDBERG. What every computer scientist should know about floating-point arithmetic. *ACM computing surveys (CSUR)*, **23**(1):5–48, 1991.
- [4] IEEE Standard for Binary Floating-Point Arithmetic. *ANSI/IEEE Std 754-1985*:1–20, 1985.
DOI: [10.1109/IEEESTD.1985.82928](https://doi.org/10.1109/IEEESTD.1985.82928).
- [5] IEEE Standard for Floating-Point Arithmetic. *IEEE Std 754-2008*:1–70, 2008.
DOI: [10.1109/IEEESTD.2008.4610935](https://doi.org/10.1109/IEEESTD.2008.4610935).
- [6] IEEE Standard for Floating-Point Arithmetic. *IEEE Std 754-2019*:1–84, 2019.
DOI: [10.1109/IEEESTD.2019.8766229](https://doi.org/10.1109/IEEESTD.2019.8766229).
- [7] V. LEGAT. *Mathématiques et méthodes numériques*. Lecture notes for the course EPL1104 at École polytechnique de Louvain, 2009.
URL: <https://perso.uclouvain.be/vincent.legat/documents/epl1104/epl1104-notes-v8-2.pdf>.
- [8] A. MAGNUS. *Analyse numérique: approximation, interpolation, intégration*. Lecture notes for the course INMA2171 at École polytechnique de Louvain, 2010.
URL: <https://perso.uclouvain.be/alphonse.magnus/num1a/m217111.pdf>.
- [9] J. M. ORTEGA and W. C. RHEINBOLDT. *Iterative solution of nonlinear equations in several variables*, volume **30** of *Classics in Applied Mathematics*. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, PA, 2000.
DOI: [10.1137/1.9780898719468](https://doi.org/10.1137/1.9780898719468).
URL: <https://doi-org.extranet.enpc.fr/10.1137/1.9780898719468>.
- [10] A. QUARTERONI, R. SACCO, and F. SALERI. *Numerical mathematics*, volume **37** of *Texts in Applied Mathematics*. Springer-Verlag, Berlin, second edition, 2007.
DOI: [10.1007/b98885](https://doi.org/10.1007/b98885).
- [11] Y. SAAD. *Iterative methods for sparse linear systems*. Society for Industrial and Applied Mathematics, Philadelphia, PA, second edition, 2003.
DOI: [10.1137/1.9780898718003](https://doi.org/10.1137/1.9780898718003).
URL: <https://doi-org.extranet.enpc.fr/10.1137/1.9780898718003>.
- [12] Y. SAAD. *Numerical methods for large eigenvalue problems*, volume **66** of *Classics in Applied Mathematics*. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, PA, 2011.
DOI: [10.1137/1.9781611970739.ch1](https://doi.org/10.1137/1.9781611970739.ch1).
URL: <https://doi-org.extranet.enpc.fr/10.1137/1.9781611970739.ch1>.

- [13] J. R. SHEWCHUK et al. An introduction to the conjugate gradient method without the agonizing pain, 1994.
URL: <https://www.cs.cmu.edu/~quake-papers/painless-conjugate-gradient.pdf>.
- [14] L. N. TREFETHEN. The definition of numerical analysis. Technical report, Cornell University, 1992.
URL: <https://cims.nyu.edu/~oneil/courses/sp18-math252/trefethen-def-na.pdf>.
- [15] P. VAN DOOREN. *Analyse numérique*. Lecture notes for the course INMA1170 at École polytechnique de Louvain, 2012.
- [16] F. VERHULST. *Nonlinear differential equations and dynamical systems*. Universitext. Springer-Verlag, Berlin, second edition, 1996.
DOI: 10.1007/978-3-642-61453-8.
URL: <https://doi-org.extranet.enpc.fr/10.1007/978-3-642-61453-8>.
- [17] M. VIANELLO and R. ZANOVELLO. On the superlinear convergence of the secant method. *Amer. Math. Monthly*, **99**(8):758–761, 1992.
DOI: 10.2307/2324244.
URL: <https://doi-org.extranet.enpc.fr/10.2307/2324244>.
- [18] C VUIK and D. J. P. LAHAYE. *Scientific Computing*. Lecture notes for the course wi4201 at Delft University of Technology, 2019.
URL: http://ta.twi.tudelft.nl/users/vuik/wi4201/wi4201_notes.pdf.