MA3227 Numerical Analysis II

References

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References

Access to books

We often have free access to digital copies of the books listed below via the library bookmarklet.

Installation of the bookmarklet is described at

`https://libguides.nus.edu.sg/findfulltext/proxybookmark`.

Once installed, proceed as follows:

- Click on the `doi` links provided below. This will open the book website in your browser.
- Click on the library bookmarklet and log in using your university credentials when prompted.
- The book website will reload and you should now have full access.

References

Finite difference discretisation

- https://www.ljll.math.upmc.fr/frey/cours/UdC/ma691/ma691_ch6.pdf
- http://www-users.math.umn.edu/~arnold/papers/stability.pdf

Sparse LU factorisation

- I. S. Duff, A. M. Erisman, and J. K. Reid. *Direct Methods for Sparse Matrices.* Oxford University Press (2017), doi:10.1093/acprof:oso/9780198508380.001.0001

Least squares, Krylov subspace methods

- L. N. Trefethen and D. Bau. *Numerical Linear Algebra.* Society for Industrial and Applied Mathematics (1997),

Jacobi & multigrid methods

- J. W. Demmel. *Applied Numerical Linear Algebra.* Society for Industrial and Applied Mathematics (1997), doi:10.1137/1.9781611971446

References

Nonlinear equations

- R. L. Burden and J. D. Faires. *Numerical Analysis.* Brooks/Cole, Cengage Learning (2011),

  Also a good reference for many other topics in this module, with very detailed descriptions and many examples.

Ordinary differential equations

- E. Suli and D. F. Mayers. *An Introduction to Numerical Analysis.* Cambridge University Press (2003), doi:10.1017/CBO9780511801181