

# Quiz 1 – Solutions

Sci Comp for DPhil Students 16.10.18

What do these abbreviations stand for?

1. FFT *Fast Fourier Transform*
2. FFTW *Fastest Fourier Transform in the West*
3. ADIFOR *Automatic Differentiation of Fortran*
4. DASSL *Differential and Algebraic Systems Solver*
5. GMRES *Generalized Minimum Residuals*
6. ILU *Incomplete LU (factorization)*
7. BFGS *Broyden-Fletcher-Goldfarb-Shanno*
8. SVD *Singular Value Decomposition*
9. ODE *Ordinary Differential Equation*
10. IPOPT *Interior Point Optimizer*
11. CG *Congugate Gradients*
12. PETSc *Portable Extensible Toolkit for Scientific Computation*
13. NAG *Numerical Algorithms Group*
14. GPU *Graphics Processing Unit*
15. NaN *Not a Number*
16. MPI *Message-Passing Interface*
17. HPF *High-Performance Fortran*
18. FEM *Finite Element Method*
19. SISC *SIAM Journal on Scientific Computing*
20. UQ *Uncertainty Quantification*
21. CFL *Courant, Friedrichs & Lewy*
22. NEOS *Network-Enabled Optimization System*
23. BLAS *Basic Linear Algebra Subprograms*
24. ATLAS *Automatically Tuned Linear Algebra Software*
25. LAPACK *Linear Algebra (software) Package*