

NAG Library Chapter Contents

f04 – Simultaneous Linear Equations

f04 Chapter Introduction

Function Name	Mark of Introduction	Purpose
f04adc	1	nag_complex_lin_eqn_mult_rhs Approximate solution of complex simultaneous linear equations with multiple right-hand sides Note: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
f04agc	1	nag_real_cholesky_solve_mult_rhs Approximate solution of real symmetric positive definite simultaneous linear equations (coefficient matrix already factorized by nag_real_cholesky (f03aec)) Note: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
f04ajc	1	nag_real_lu_solve_mult_rhs Approximate solution of real simultaneous linear equations (coefficient matrix already factorized by nag_real_lu (f03afc)) Note: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
f04akc	1	nag_complex_lu_solve_mult_rhs Approximate solution of complex simultaneous linear equations (coefficient matrix already factorized by nag_complex_lu (f03ahc)) Note: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
f04arc	1	nag_real_lin_eqn Approximate solution of real simultaneous linear equations, one right-hand side Note: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
f04awc	1	nag_hermitian_lin_eqn_mult_rhs Approximate solution of complex Hermitian positive definite simultaneous linear equations (coefficient matrix already factorized by nag_complex_cholesky (f01bnc)) Note: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
f04bac	8	nag_real_gen_lin_solve Computes the solution, estimated condition number and error-bound to a real system of linear equations
f04bbc	8	nag_real_band_lin_solve Computes the solution, estimated condition number and error-bound to a real banded system of linear equations
f04bcc	8	nag_real_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a real tridiagonal system of linear equations

f04bdc	8	nag_real_sym_posdef_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite system of linear equations
f04bec	8	nag_real_sym_posdef_packed_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite system of linear equations, packed storage
f04bfc	8	nag_real_sym_posdef_band_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite banded system of linear equations
f04bgc	8	nag_real_sym_posdef_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite tridiagonal system of linear equations
f04bhc	8	nag_real_sym_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric system of linear equations
f04bjc	8	nag_real_sym_packed_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric system of linear equations, packed storage
f04cac	8	nag_complex_gen_lin_solve Computes the solution, estimated condition number and error-bound to a complex system of linear equations
f04cbc	8	nag_complex_band_lin_solve Computes the solution, estimated condition number and error-bound to a complex banded system of linear equations
f04ccc	8	nag_complex_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a complex tridiagonal system of linear equations
f04cdc	8	nag_herm_posdef_lin_solve Computes the solution, estimated condition number and error-bound to a complex Hermitian positive definite system of linear equations
f04cec	8	nag_herm_posdef_packed_lin_solve Computes the solution, estimated condition number and error-bound to a complex Hermitian positive definite system of linear equations, packed storage
f04cfc	8	nag_herm_posdef_band_lin_solve Computes the solution, estimated condition number and error-bound to a complex Hermitian positive definite banded system of linear equations
f04cgc	8	nag_herm_posdef_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a complex Hermitian positive definite tridiagonal system of linear equations
f04chc	8	nag_herm_lin_solve Computes the solution and error-bound to a complex Hermitian system of linear equations
f04cjc	8	nag_herm_packed_lin_solve Computes the solution, estimated condition number and error-bound to a complex Hermitian system of linear equations, packed storage
f04dhc	8	nag_complex_sym_lin_solve Computes the solution, estimated condition number and error-bound to a complex symmetric system of linear equations
f04djc	8	nag_complex_sym_packed_lin_solve Computes the solution, estimated condition number and error-bound to a complex symmetric system of linear equations, packed storage
f04mcc	1	nag_real_cholesky_skyline_solve Approximate solution of real symmetric positive definite variable-bandwidth simultaneous linear equations (coefficient matrix already factorized by nag_real_cholesky_skyline (f01mcc))
f04ydc	24	nag_linsys_real_gen_norm_rcomm Norm estimation (for use in condition estimation), real rectangular matrix

f04zdc	24	nag_linsys_complex_gen_norm_rcomm Norm estimation (for use in condition estimation), complex rectangular matrix
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