NAG Library Chapter Contents

C06 – Summation of Series

C06 Chapter Introduction – a description of the Chapter and an overview of the algorithms available

Routine Name	Mark of Introduction	Purpose
c06baf	10	nagf_sum_accelerate Acceleration of convergence of sequence, Shanks' transformation and epsilon algorithm
c06dcf	23	nagf_sum_chebyshev Sum of a Chebyshev series at a set of points
c06faf	8	nagf_sum_fft_real_1d_rfmt Single one-dimensional real discrete Fourier transform, extra workspace for greater speed
c06fbf	8	nagf_sum_fft_hermitian_1d_rfmt Single one-dimensional Hermitian discrete Fourier transform, extra workspace for greater speed
c06fcf	8	nagf_sum_fft_complex_1d_sep Single one-dimensional complex discrete Fourier transform, extra workspace for greater speed
c06fff	11	nagf_sum_fft_complex_multid_1d_sep One-dimensional complex discrete Fourier transform of multidimensional data
c06fjf	11	nagf_sum_fft_complex_multid_sep Multidimensional complex discrete Fourier transform of multidimensional data
c06fkf	11	nagf_sum_convcorr_real Circular convolution or correlation of two real vectors, no restrictions on n
c06fpf	12	nagf_sum_withdraw_fft_real_1d_multi_rfmt Multiple one-dimensional real discrete Fourier transforms **Note**: this routine is scheduled for withdrawal at Mark 28, see Advice on Replacement Calls for Withdrawn/Superseded Routines for further information.
c06fqf	12	nagf_sum_withdraw_fft_hermitian_1d_multi_rfmt Multiple one-dimensional Hermitian discrete Fourier transforms **Note**: this routine is scheduled for withdrawal at Mark 28, see Advice on Replacement Calls for Withdrawn/Superseded Routines for further information.
c06fxf	17	nagf_sum_fft_complex_3d_sep Three-dimensional complex discrete Fourier transform
c06laf	12	nagf_sum_invlaplace_crump Inverse Laplace transform, Crump's method
c06lbf	14	nagf_sum_invlaplace_weeks Inverse Laplace transform, modified Weeks' method
c06lcf	14	nagf_sum_invlaplace_weeks_eval Evaluate inverse Laplace transform as computed by c06lbf
c06paf	19	nagf_sum_fft_realherm_1d Single one-dimensional real and Hermitian complex discrete Fourier transform, using complex storage format for Hermitian sequences
c06pcf	19	nagf_sum_fft_complex_1d Single one-dimensional complex discrete Fourier transform, complex data type

c06pff	19	nagf_sum_fft_complex_multid_1d One-dimensional complex discrete Fourier transform of multidimensional data (using complex data type)
c06pjf	19	nagf_sum_fft_complex_multid Multidimensional complex discrete Fourier transform of multidimensional data (using complex data type)
c06pkf	19	nagf_sum_convcorr_complex Circular convolution or correlation of two complex vectors
c06ppf	19	nagf_sum_fft_realherm_1d_multi_row Multiple one-dimensional real and Hermitian complex discrete Fourier transforms, using row ordered complex storage format for Hermitian sequences
c06pqf	19	nagf_sum_fft_realherm_1d_multi_col Multiple one-dimensional real and Hermitian complex discrete Fourier transforms, using column ordered complex storage format for Hermitian sequences
c06prf	19	nagf_sum_fft_complex_1d_multi_row Multiple one-dimensional complex discrete Fourier transforms using complex data type
c06psf	19	nagf_sum_fft_complex_1d_multi_col Multiple one-dimensional complex discrete Fourier transforms, complex data type
c06puf	19	nagf_sum_fft_complex_2d Two-dimensional complex discrete Fourier transform, complex data type
c06pvf	24	nagf_sum_fft_real_2d Two-dimensional real-to-complex discrete Fourier transform
c06pwf	24	nagf_sum_fft_hermitian_2d Two-dimensional complex-to-real discrete Fourier transform
c06pxf	19	nagf_sum_fft_complex_3d Three-dimensional complex discrete Fourier transform, complex data type
c06pyf	24	nagf_sum_fft_real_3d Three-dimensional real-to-complex discrete Fourier transform
c06pzf	24	nagf_sum_fft_hermitian_3d Three-dimensional complex-to-real discrete Fourier transform
c06raf	19	nagf_sum_fft_real_sine_simple Discrete sine transform (easy-to-use)
c06rbf	19	nagf_sum_fft_real_cosine_simple Discrete cosine transform (easy-to-use)
c06rcf	19	nagf_sum_fft_real_qtrsine_simple Discrete quarter-wave sine transform (easy-to-use)
c06rdf	19	nagf_sum_fft_real_qtrcosine_simple Discrete quarter-wave cosine transform (easy-to-use)
c06ref	25	nagf_sum_fft_sine Multiple discrete sine transforms, simple
c06rff	25	nagf_sum_fft_cosine Multiple discrete cosine transforms, simple
c06rgf	25	nagf_sum_fft_qtrsine Multiple discrete quarter-wave sine transforms, simple
c06rhf	25	nagf_sum_fft_qtrcosine Multiple discrete quarter-wave cosine transforms, simple
c06saf	26.1	nagf_sum_fast_gauss Multidimensional fast Gauss transform