

NAG Library Chapter Contents

c06 – Fourier Transforms

c06 Chapter Introduction

Function Name	Mark of Introduction	Purpose
c06dcc	23	nag_sum_cheby_series Sum of a Chebyshev series at a set of points
c06eac	1	nag_fft_real Single one-dimensional real discrete Fourier transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06ebc	1	nag_fft_hermitian Single one-dimensional Hermitian discrete Fourier transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06ecc	1	nag_fft_complex Single one-dimensional complex discrete Fourier transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06ekc	1	nag_convolution_real Circular convolution or correlation of two real vectors Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06fkc	24	nag_sum_convcorr_real Circular convolution or correlation of two real vectors, no restrictions on n
c06fpc	1	nag_fft_multiple_real Multiple one-dimensional real discrete Fourier transforms
c06fqc	1	nag_fft_multiple_hermitian Multiple one-dimensional Hermitian discrete Fourier transforms
c06frc	1	nag_fft_multiple_complex Multiple one-dimensional complex discrete Fourier transforms Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06fuc	1	nag_fft_2d_complex Two-dimensional complex discrete Fourier transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06gbc	1	nag_conjugate_hermitian Complex conjugate of Hermitian sequence Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06gcc	1	nag_conjugate_complex Complex conjugate of complex sequence Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.

c06gqc	1	nag_multiple_conjugate_hermitian Complex conjugate of multiple Hermitian sequences
c06gsc	1	nag_multiple_hermitian_to_complex Convert Hermitian sequences to general complex sequences
c06gzc	1	nag_fft_init_trig Initialization function for other c06 functions
c06hac	2	nag_fft_multiple_sine Discrete sine transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06hbc	2	nag_fft_multiple_cosine Discrete cosine transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06hcc	2	nag_fft_multiple_qtr_sine Discrete quarter-wave sine transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06hdc	2	nag_fft_multiple_qtr_cosine Discrete quarter-wave cosine transform Note: this function is scheduled for withdrawal at Mark 26, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c06pac	24	nag_sum_fft_realherm_1d Single one-dimensional real and Hermitian complex discrete Fourier transform, using complex storage format for Hermitian sequences
c06pcc	24	nag_sum_fft_complex_1d Single one-dimensional complex discrete Fourier transform, complex data type
c06pfc	7	nag_fft_multid_single One-dimensional complex discrete Fourier transform of multidimensional data (using complex data type)
c06pjc	7	nag_fft_multid_full Multidimensional complex discrete Fourier transform of multidimensional data (using complex data type)
c06psc	24	nag_sum_fft_complex_1d_multi Multiple one-dimensional complex discrete Fourier transforms, complex data type
c06puc	24	nag_sum_fft_complex_2d Two-dimensional complex discrete Fourier transform, complex data type
c06pvc	24	nag_sum_fft_real_2d Two-dimensional real-to-complex discrete Fourier transform
c06pwc	24	nag_sum_fft_hermitian_2d Two-dimensional complex-to-real discrete Fourier transform
c06pxc	7	nag_fft_3d Three-dimensional complex discrete Fourier transform, complex data type
c06pyc	24	nag_sum_fft_real_3d Three-dimensional real-to-complex discrete Fourier transform
c06pzc	24	nag_sum_fft_hermitian_3d Three-dimensional complex-to-real discrete Fourier transform
c06rec	24	nag_sum_fft_sine Multiple discrete sine transforms, simple
c06rfc	24	nag_sum_fft_cosine Multiple discrete cosine transforms, simple

c06rgc	24	nag_sum_fft_qtrsine Multiple discrete quarter-wave sine transforms, simple
c06rhc	24	nag_sum_fft_qtrcosine Multiple discrete quarter-wave cosine transforms, simple
