NAG Library Manual, Mark 26

Contents

Copyright Statement

Introduction

How to Use the NAG Library and its Documentation

NAG C Library News, Mark 26

Implementation-specific Details for Users

Advice on Replacement Calls for Withdrawn/Superseded Functions

Support from NAG

Index

Chapters of the Library

a00 – Library Identification

a02 – Complex Arithmetic

c02 – Zeros of Polynomials

c05 – Roots of One or More Transcendental Equations

c06 – Fourier Transforms

c09 – Wavelet Transforms

d01 – Quadrature

d02 – Ordinary Differential Equations

d03 – Partial Differential Equations

d04 – Numerical Differentiation

d05 – Integral Equations

d06 – Mesh Generation

e01 – Interpolation

e02 – Curve and Surface Fitting

e04 – Minimizing or Maximizing a Function

e05 – Global Optimization of a Function

f – Linear Algebra

f01 – Matrix Operations, Including Inversion

f02 – Eigenvalues and Eigenvectors

f03 – Determinants

f04 – Simultaneous Linear Equations

f06 – Linear Algebra Support Functions

f07 – Linear Equations (LAPACK)

f08 – Least Squares and Eigenvalue Problems (LAPACK)

f11 – Large Scale Linear Systems

f12 – Large Scale Eigenproblems
f16 – NAG Interface to BLAS
g01 – Simple Calculations on Statistical Data
g02 – Correlation and Regression Analysis
g03 – Multivariate Methods
g04 – Analysis of Variance
g05 – Random Number Generators
g07 – Univariate Estimation
g08 – Nonparametric Statistics
g10 – Smoothing in Statistics
g11 – Contingency Table Analysis
g12 – Survival Analysis
g13 – Time Series Analysis
g22 – Linear Model Specification
h – Operations Research
m01 – Sorting and Searching
s – Approximations of Special Functions
x01 – Mathematical Constants
x02 – Machine Constants
x04 – Input/Output Utilities
x06 – OpenMP Utilities
x07 – IEEE Arithmetic