

NAG Library Manual, Mark 26

Contents

Copyright Statement

Foreword

Introduction

How to Use the NAG Library and its Documentation

Mark 26 NAG Fortran Library News

Implementation-specific Details for Users

Advice on Replacement Calls for Withdrawn/Superseded Routines

Code Contributors

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 – Summation of Series

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

F05 – Orthogonalization

F06 – Linear Algebra Support Routines

F07 – Linear Equations (LAPACK)
F08 – Least Squares and Eigenvalue Problems (LAPACK)
F11 – Large Scale Linear Systems
F12 – Large Scale Eigenproblems
F16 – Further Linear Algebra Support Routines
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
H – Operations Research
M01 – Sorting and Searching
S – Approximations of Special Functions
X01 – Mathematical Constants
X02 – Machine Constants
X03 – Inner Products
X04 – Input/Output Utilities
X05 – Date and Time Utilities
X06 – OpenMP Utilities
X07 – IEEE Arithmetic
