

<<LAPACK95用户指南>>

图书基本信息

书名：<<LAPACK95用户指南>>

13位ISBN编号：9787302245032

10位ISBN编号：7302245037

出版时间：2011-2

出版时间：清华大学出版社

作者：巴克

页数：258

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<LAPACK95用户指南>>

内容概要

lapack95 is a fortran 95 interface to the fortran 77 lapack library. it is relevant for anyone who writes in the fortran 95 language and needs reliable software for basic numerical linear algebra. it improves upon the original user-interface to the lapack package, taking advantage of the considerable simplifications that fortran 95 allows.

lapack95 users' guide provides an introduction to the design of the lapack\$ package, a detailed description of its contents, reference manuals for the leading comments of the routines, and example programs. for more information on lapackg5 go to <http://www.netlib.org/lapack95/>.

readers with a basic knowledge of lapack will find this book to be an excellent companion to the popular lapack users' guide, to which the authors frequently refer throughout this new volume.

<<LAPACK95用户指南>>

作者简介

作者：（美国）巴克（Barker.V.A）等

<<LAPACK95用户指南>>

书籍目录

preface

I general information

1 essentials

1.1 lapack95

1.2 problems that lapack95 can solve

1.3 computers for which lapack95 is suitable

1.4 lapack and the blas

1.5 availability and installation of software

1.5.1 lapack95

1.5.1.1 incorporating machine dependencies

1.5.2 lapack

1.5.3 blas

1.5.4 installation debugging hints

1.5.5 mirror repositories of netlib

1.5.6 availability of software via cd-rom

1.6 support

1.7 commercial use

2 contents of lapack95

2.1 structure of lapack95

2.1.1 levels of routines

2.1.2 data types and precision

2.1.3 naming scheme

2.2 driver routines

2.2.1 linear equations

2.2.2 linear least squares (lls) problems

2.2.3 generalized linear least squares (lse and glm)

problems

2.2.4 standard eigenvalue and singular value problems

2.2.4.1 symmetric eigenproblems (sep)

2.2.4.2 nonsymmetric eigenproblems (nep)

2.2.4.3 singular value decomposition (svd)

2.2.5 generalized eigenvalue and singular value problems

2.2.5.1 generalized symmetric definite eigenproblems

(gsep)

2.2.5.2 generalized nonsymmetric eigenproblems (gnep)

2.2.5.3 generalized singular value decomposition (gsvd)

3 documentation design and program examples

.....

II driver routines

III computational routines

bibliography

index by keyword

index by routine name

<<LAPACK95用户指南>>

章节摘录

版权页：插图：4.3 Errors and Poor Performance
If an error occurs, the user's first thought should be that the successful use of LAPACK95 relies heavily on the proper installation of the BLAS, LAPACK, and LAPACK95 packages. As mentioned earlier, each of these includes a test suite that should be run as part of the installation process. If the error occurs during the installation process, the user should follow the advice given in Section 1.5.4. Henceforth it will be assumed that the installation process (including the running of the three test suites) was successful and that the error first occurs in an application. Here the user should:

- Reread the documentation of the driver and computational routines being used, paying particular attention to the description of the argument INFO.
- Check the installation of machine dependencies (Section 1.5.1.1).
- In the case of an LAPACK95 driver routine, try to reproduce the results of the numerical example(s) given for that routine in Part II. The user can write his own main program for this purpose or use the one provided in the EXAMPLE1 directory of the LAPACK95 distribution file. (See Section 1.5.1.)
- Consult the FAQ lists at the home pages of the BLAS, LAPACK and LAPACK95.
- Consult the release notes files at the same home pages. These files contain lists of known difficulties that have been diagnosed and corrected (or will be corrected in the next release), or reported to the vendor in the case of machine-specific BLAS.
- Report the error to the Email address in Section 1.6 with the following information. If possible: A test case, a description of the problem and expected results, and the actions, if any, that the user has already taken to fix the error.

<<LAPACK95用户指南>>

编辑推荐

《LAPACK95 用户指南(影印版)》：国际著名数学图书

<<LAPACK95用户指南>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>