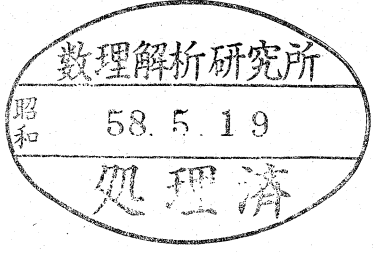


2K-5700

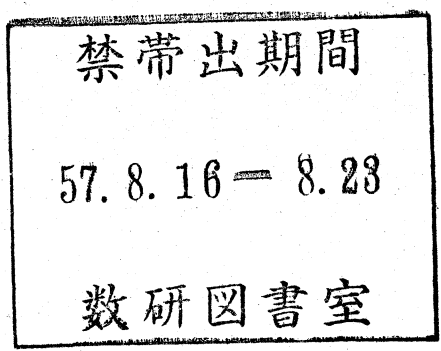


ス
31
2

数理解析研究所講究録 463

短期共同研究

線型計算の標準算法と実現



京都大学数理解析研究所

1982年7月

RIMS *Kokyuroku* 463

Standard Algorithms for Linear Computation
and the Implementations

July, 1982

Research Institute for Mathematical Sciences

Kyoto University, Kyoto, Japan

京都大学

2924153

図書

数理解析研究所

短期共同研究

線型計算の標準算法と実現

報告集

1982年 6月 10日 - 6月 12日

研究代表者 一松 信

目次

- 1. Preface1

京大 数理解 一松 信

- 2. A Survey of Results on the Inverses of Toeplitz
and Band Matrices2

University of Manitoba D. S. Meek

- 3. LU-Decomposition of a Matrix with Entries of
Different Kinds23

東大 工 室田一雄

- 4. 二段階メッシュによるモード解析法
— スツルム・サブスペース法とスツルム・ランチョス
法の比較に関連して —33

日立 中研 村田健郎

- 5. Van der Corput 列に基づく補間法の数値的安定性56

名大 工 島居達生

6. 並列数値計算のシミュレーション72

筑波大 電子情報 森正武

Preface

This volume is the Bulletin of the Meeting at R.I.M.S. during May 10 - 12, 1982 under the title:

Standard Algorithms for Linear Computation
and the Implementations.

This meeting has been organized for Prof. D.S.Meek for his visit to Japan. I beg the pardon for the readers that the following papers are written in Japanese and not necessarily be within the area of the title:

Kenro Murata : Mode analysis by two-step mesh,
— with the comparison of Sturm subspace method vs.
Sturm-Lanczos method. ←

Tatsuo Torii: Numerical stability of interpolation based on van der Corput sequence.

Masatake Mori: Simulation for parallel numerical computations.

Also this volume does not include a lecture by Prof. Fumio Niino: An extension of Minkowski's inequality.

I am grateful for all participants who jointed us and made valuable discussions.

1982 July

Sin Hitotumatu
Research Institute
for Mathematical Sciences
Kyoto University