Título:

Autor:

Editorial:

Tema:

Sinopsis

Precio: $1116.50

Año: 2008

Edición: 1ª

ISBN: 9780801887147

In recent years several new classes of matrices have been discovered and their structure exploited to design fast and accurate algorithms. In this new reference work, Raf Vandebril, Marc Van Barel, and Nicola Mastronardi present the first comprehensive overview of the mathematical and numerical properties of the family's newest member: semiseparable matrices.

The text is divided into three parts. The first provides some historical background and introduces concepts and definitions concerning structured rank matrices. The second offers some traditional methods for solving systems of equations involving the basic subclasses of these matrices. The third section discusses structured rank matrices in a broader context, presents algorithms for solving higher-order structured rank matrices, and examines hybrid variants such as block quasiseparable matrices. An accessible case study clearly demonstrates the general topic of each new concept discussed. Many of the routines featured are implemented in Matlab and can be downloaded from the Web for further exploration.

"In particular, the relation with algorithms of historical interest will make the book interesting for its readers."_Dietrich Braess, Zentralblatt MATH

"An indispensable tool for scholars and research workers in mathematics and the mathematical sciences."_Mathematical Reviews