Frontiers in applied mathematics

Deskripsi Lengkap: https://lib.ui.ac.id/detail?id=20443145&lokasi=lokal

----

Abstrak

A thoughtful consideration of the current level of development of multigrid methods, this volume is a carefully edited collection of papers that addresses its topic on several levels. The first three chapters orient the reader who is familiar with standard numerical techniques to multigrid methods, first by discussing multigrid in the context of standard techniques, second by detailing the mechanics of use of the method, and third by applying the basic method to some current problems in fluid dynamics. The fourth chapter provides a unified development, complete with theory, of algebraic multigrid (AMG), which is a linear equation solver based on multigrid principles. The last chapter is an ambitious development of a very general theory of multigrid methods for variationally posed problems. Included as an appendix is the latest edition of the Multigrid Bibliography, an attempted compilation of all existing research publications on multigrid.