Grid Computing originated as a paradigm for high-performance computing, offering an alternative to expensive supercomputers through the sharing of an increasing variety of distributed computational resources at large scale.

The conference offers a wide range of the following topics: Numerical Modeling; Numerical Stochastics; Numerical Approximation and Computational Geometry; Numerical Linear Algebra and Numerical Solution of Transcendental Equations; Numerical Methods for Differential Equations; High Performance Scientific Computing; and also special topics such as Novel methods in computational biology. The papers were carefully reviewed and selected from 98 submissions. The conference offers a wide range of the following topics: Numerical Modeling; Numerical Stochastics; Numerical Approximation and Computational Geometry; Numerical Linear Algebra and Numerical Solution of Transcendental Equations; Numerical Methods for Differential Equations; High Performance Scientific Computing; and also special topics such as Novel methods in computational biology. The papers were carefully reviewed and selected from 98 submissions.

Numerical Methods and Analysis is the ideal text for students in advanced undergraduate mathematics and engineering courses who are interested in gaining an understanding of numerical methods and numerical analysis. It offers students a practical knowledge of modern techniques in scientific computing. The authors have carefully structured the book with many detailed worked examples. The text is intended for use in graduate courses of engineering, applied mathematics and applied computation where tools as mathematical and computational modeling, numerical methods and scientific computing are used. The authors have carefully structured the book with many detailed worked examples. The text is intended for use in graduate courses of engineering, applied mathematics and applied computation where tools as mathematical and computational modeling, numerical methods and scientific computing are used.

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Offers students a practical knowledge of modern techniques in scientific computing.
The book presents a systematic approach to overcome the crisis in software engineering depends which not only depends on technology-related but also on human-related factors. It serves as an excellent one-semester text for undergraduates majoring in mathematics, and for students in mathematics education who want a thorough understanding of the theory behind the real number system and calculus.

The Real Numbers and Real Analysis will serve as an excellent one-semester text for undergraduates majoring in mathematics, and for students in mathematics education who want a thorough understanding of the theory behind the real number system and calculus. The book illustrates these principles of model selection and regression-based approach to model selection.

These proceedings collect lectures given at ENUMATH 2005, the 6th European Conference on Numerical Mathematics and Advanced Applications held in Santiago de Compostela, Spain in July, 2005. Topics include...