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Introduction; 2 Uniform Distribution with Discontinuity; 2.1 Recurrent Formula; 2.2 Auxiliary Results; 2.3 Main Result; References; Modular Contractions and Their Application; 1 Introduction; 2 Modulars and Modular Spaces; 3 Sequences in Modular Spaces and Modular Convergence; 4 Examples of Metric and Modular Convergences; 5 A Fixed-Point Theorem for Modular Contractions; 6 An Application of the Fixed-Point Theorem; 7 Concluding Remarks; References

Network-Based Representation of Stock Market Dynamics: An Application to American and Swedish Stock Markets1 Introduction; 2 Notations and Model; 3 Static and Dynamic Behavior of Market Graphs; 4 Conclusion; References; On a Numerically Stable Algorithm for the Analysis of Generalized Volterra Lattice; 1 Volterra Lattice and Inverse Spectral Problem for Jacobi Operator; 2 Generalized Volterra Lattice and Inverse Spectral Problem for Band Hessenberg Operator; 3 Simple Version of Modified Moments Algorithm; 4 Main Result; References

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5.3.2 Sequencing of Production Batches

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#### Sommario/riassunto

This volume contains a selection of contributions from the "First International Conference in Network Analysis," held at the University of Florida, Gainesville, on December 14-16, 2011. The remarkable diversity of fields that take advantage of Network Analysis makes the endeavor of gathering up-to-date material in a single compilation a useful, yet very difficult, task. The purpose of this volume is to overcome this difficulty by collecting the major results found by the participants and combining them in one easily accessible compilation. Network analysis has become a major research topic over the last several years. The broad range of applications that can be described and analyzed by means of a network is bringing together researchers, practitioners and other scientific communities from numerous fields such as Operations Research, Computer Science, Transportation, Energy, Social Sciences, and more. The contributions not only come from different fields, but also cover a broad range of topics relevant to the theory and practice of network analysis, including the reliability of complex networks, software, theory, methodology, and applications.

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