

CONTENTS

PREFACE	v
ACKNOWLEDGMENTS	vi
CONTRIBUTORS	vii
Introduction	
<i>Y. L. Tong</i>	1
Stochastic Versions of Rearrangement Inequalities	
<i>Catherine D'Abadie and Frank Proschan</i>	4
On Group Induced Orderings, Monotone Functions, and Convolution Theorems	
<i>Morris L. Eaton</i>	13
Invariant Ordering and Order Preservation	
<i>D. R. Jensen</i>	26
Random Replacement Schemes and Multivariate Majorization	
<i>Samuel Karlin and Yosef Rinott</i>	35
Eigenvalue Inequalities for Random Evolutions: Origins and Open Problems	
<i>Joel E. Cohen</i>	41
On TP ₂ and Log-Concavity	
<i>Somesh Das Gupta and S. K. Sarkar</i>	54
A Class of Generalizations of Hölder's Inequality	
<i>Marshall Freimer and Govind S. Mudholkar</i>	59
Convexity Properties of Entropy Functions and Analysis of Diversity	
<i>C. Radhakrishna Rao</i>	68
Some Sharp Martingale Inequalities Related to Doob's Inequality	
<i>David C. Cox</i>	78
Least Absolute Value and Median Polish	
<i>J. H. B. Kemperman</i>	84
Markov's Inequality for Random Variables Taking Values in a Linear Topological Space	
<i>Albert W. Marshall</i>	104
Probability Measures on the Circle and the Isoperimetric Inequality	
<i>Richard A. Vitale</i>	109
An Expansion for Symmetric Statistics and the Efron-Stein Inequality	
<i>Richard A. Vitale</i>	112

CONTENTS

On Chebyshev's Other Inequality <i>A. M. Fink and Max Jodeit, Jr.</i>	115
Remarks and Open Problems in the Area of the FKG Inequality <i>Kumar Joag-Dev, L. A. Shepp and Richard A. Vitale</i>	121
Asymptotic Independence and Limit Theorems for Positively and Negatively Dependent Random Variables <i>Charles M. Newman</i>	127
Stochastic Ordering of Spacings from Dependent Random Variables <i>Moshe Shaked and Y. L. Tong</i>	141
Probabilistic Ordering of Scheffé Polyhedra <i>R. Bohrer and H. P. Wynn</i>	150
Regions Whose Probabilities Increase with the Correlation Coefficient and Slepian's Theorem <i>S. W. Dharmadhikari and Kumar Joag-Dev</i>	156
Moment Inequalities with Applications to Regression and Time Series Models <i>Tze Leung Lai and Ching Zong Wei</i>	165
Stochastic Majorization of the Log-Eigenvalues of a Bivariate Wishart Matrix <i>Michael D. Perlman</i>	173
Approximations and Error Bounds in Stochastic Programming <i>John R. Birge and Roger J.-B. Wets</i>	178
Comparing Coherent Systems <i>Henry W. Block and Wagner de Souza Borges</i>	187
Multivariate Life Classes and Inequalities <i>Thomas H. Savits</i>	193
Applications of a Unified Theory of Monotonicity in Selection Problems <i>Roger L. Berger and Frank Proschan</i>	199
Selecting the t Best Cells of a Multinomial Using Inverse Sampling <i>Pinyuen Chen and Milton Sobel</i>	206
On Some Inequalities and Monotonicity Results in Selection and Ranking Theory <i>Shanti S. Gupta, Deng-Yuan Huang and S. Panchapakesan</i>	211
Dual Convex Cones of Order Restrictions with Applications <i>Richard L. Dykstra</i>	228
Tests For and Against Trends Among Poisson Intensities <i>Rhonda Magel and F. T. Wright</i>	236
A Measure of the Conformity of a Parameter Set to a Trend: The Partially Ordered Case <i>Tim Robertson and F. T. Wright</i>	244
PROGRAM OF THE SYMPOSIUM ON INEQUALITIES IN STATISTICS AND PROBABILITY	251