## **Table of Contents**

Preface	iii
Introduction	1
Arjas, E. and Norros, I. Should Minimal Repair Depend on Information?	5
Arnold, B.C. Dependence in Conditionally Specified Distributions	13
Barlow, R.E. and Pereira, C.A. de B. Conditional Independence and Probabilistic Influence Diagrams	19
Basu, A.P. A Survey of Some Inference Problems for Dependent Systems	35
Block, H.W., Chhetry, D., Fang, Z., and Sampson, A.R. Partial Orderings on Permutations	45
Block, H.W., Langberg, N.A., and Savits, T.H. Comparisons for Maintenance Policies Involving Complete and Minimal Repair	57
Block, H.W., Langberg, N.A., and Stoffer, D.S. Time Series Models for Non-Gaussian Processes	69
Boland, P.J., Proschan, F., and Tong, Y.L. Some Majorization Inequalities for Functions of Exchangeable Random Variables	85
Brady, B. and Singpurwalla, N.D. Stochastically Monotone Dependence	93
Bromek, T. and Kowalczyk, T. A Decision Approach to Ordering Stochastic Dependence	103
Brown, M. On a Correlation Inequality and Its Applications	111

Chan, W., Proschan, F., and Sethuraman, J. Convex-Ordering Among Functions, with Applications to Reliability and Mathematical Statistics	121
Cohen, A., Perlman, M.D., and Sackrowitz, H.B. Unbiasedness of Tests of Homogeneity When Alternatives Are Ordered	135
Diaconis, P. and Perlman, M.D. Bounds for Tail Probabilities of Weighted Sums of Independent Gamma Random Variables	147
Douglas, R. and Fienberg, S.E. An Overview of Dependency Models for Cross-classified Categorical Data Involving Ordinal Variables	167
Douglas, R., Fienberg, S.E., Lee, ML. T., Sampson, A.R., and Whitaker, L.R. Positive Dependence Concepts for Ordinal Contingency Tables	189
Enns, E.G. Dependence Relationships for Rays in a Convex Body in $\Re^n$	203
Flournoy, N. Bivariate Markov Chains Containing a Failure Process	207
Glaz, J. A Comparison of Bonferroni-type and Product-type Inequalites in Presence of Dependence	223
Govindarajulu, Z. Robustness of Mann-Whitney-Wilcoxon Test for Scale to Dependence in the Variables	237
Gupta, P.L. and Gupta, R.D. Relative Errors in Reliability Measures	251
Hollander, M., Proschan, F., and Sconing, J. Information, Censoring, and Dependence	257
Hüsler, J. Dependence in Multivariate Extreme Values	269

Jensen, D.R. Invariance Under Dependence By Mixing	283
Joag-Dev, K.	
Conditional Negative Dependence in Stochastic Ordering and Interchangeable Random Variables	295
Johnson, R.A. and Langeland, T. A Linear Combination Test for Detecting Serial Correlation in Multivariate Samples	299
Kenyon, J.R. Calculating Improved Bounds and Approximations for Sequential Testing Procedures	315
Kotz, S., Wang, Q., and Hung, K. Interrelations Among Various Definitions of Bivariate Positive Dependence	333
Lee, ML. T. Tests of Independence Against Likelihood Ratio Dependence in Ordered Contingency Tables	<b>3</b> 51
Longford, N.T. Classes of Multivariate Exponential and Multivariate Geometric Distributions Derived from Markov Processes	359
Marshall, A.W. and Olkin, I. Multivariate Distributions Generated From Mixtures of Convolution and Product Families	371
Newman, C.M. Ising Models and Dependent Percolation	395
Scarsini, M. An Ordering of Dependence	403
Shaked, M. and Shanthikumar, J.G. Dynamic Construction and Simulation of Random Vectors	415
Singpurwalla, N.D. and Youngren, M.A. Models for Dependent Lifelengths Induced By Common Environments	435

Subramanyam, K.	
Some Comments on Positive Quadrant Dependence in Three Dimensions	443
Subramanyam, K. and Rao, M.B. On the Structure of $2 \times \infty$ Bivariate Distributions Which Are Totally Positive of Order Two	451
Vitale, R.A. On Stochastic Dependence and a Class of Degenerate Distributions	459
Wells, M.T. and Tiwari, R.C. Estimating a Distribution Function Based on Minima-Nomination Sampling	471
Wright, A.L. A Strong Limit Theorem for Processes With Associated Increments	481
Yanagimoto, T. Dependence Ordering in Statistical Models and Other Notions	489
Program of the Symposium on Dependence in Statistics and Probability	497
Conference Participants	505
Photographs	
Author Citation Index	507
Key Word and Phrases Index	519