

PREFACE

In early 1985, after having witnessed the development of the area of “positive dependence” for a sufficiently long time, we decided to organize the first symposium dedicated *solely* to this research area. The dramatic growth of this realm of research began with the seminal works of Lehmann (1966) and Esary, Proschan and Walkup (1967). Partial summaries of this research area had been given by authors such as Barlow and Proschan (1981), Marshall and Olkin (1979), and Tong (1980). Individual sessions at national meetings had been organized around subtopics in this area, and a few conferences (e.g., the Tong conference on inequalities) had overlapped in part this area.

To our knowledge, however, no conference or book had yet focused purely on the burgeoning research in the area of positive and negative dependence for the modeling and analysis of multivariate data. We wanted to bring together as many researchers in this broad and diverse field as possible. Our goal was interaction and synthesis, as well as developing directions for future research in this area. This led to the Symposium on Dependence in Probability and Statistics which was held August 1–5, 1987.

To facilitate interaction, we chose a secluded conference site in Pennsylvania’s Laurel Mountains. The Hidden Valley Conference Center provided a relaxed setting in which papers were presented, accompanied by vigorous discussion, in both organized and informal working sessions. In fact, at least one paper in this volume began during an evening discussion session at the conference. To provide some breaks from the intense program, several diversionary activities were planned. These included a trip to see nearby Fallingwater, Frank Lloyd Wright’s masterpiece, and also an evening’s musical entertainment based on old Pennsylvania music, instruments, and folklore. To give a more complete description of the Symposium, we have included an exact copy of the program on pages 497–504.

From our admittedly biased viewpoints, there was tremendous enthusiasm both in anticipation of, and especially during, the Symposium. Our colleagues in the field were all extremely supportive and helpful. Various federal agencies, including AFOSR, NSF and ARO, were early enthusiastic financial supporters of the Symposium, and eventually also became active participants.

Throughout the development of the Symposium, we set as a goal the production of a high quality volume reflecting the content of the proceedings. Our intent was to have the papers in such a volume represent the depth and diversity of current knowledge in the field, as well as point to directions for future research. The IMS Lecture Notes-Monograph Series represents for us an ideal forum to accomplish this.

To assure high standards, we required that all papers submitted be subjected to intensive refereeing. With the help of many colleagues we succeeded in having every paper refereed by one or more referees. Based upon their input, and space

considerations, not all papers submitted were accepted for publication. We owe a debt of gratitude to the following for their conscientious refereeing:

Name	Affiliation
Elja Arjas	University of Oulu, Finland
Barry C. Arnold	University of California at Riverside
Asit P. Basu	University of Missouri
Philip Boland	University College, Ireland
Vanderlei Costa Bueno	Universidade de Sao Paulo, Brazil
Timothy Costigan	The Ohio State University
Ernest Enns	University of Calgary, Canada
Emad El-Neweih	University of Illinois at Chicago
Stephen E. Fienberg	Carnegie Mellon University
Zvi Gilula	Hebrew University, Israel
Joseph Glaz	University of Connecticut
Z. Govindarajulu	University of Kentucky
William Griffith	University of Kentucky
Myles Hollander	Florida State University
F.W. Huffer	Florida State University
Satish Iyengar	University of Pittsburgh
Donald R. Jensen	Virginia Polytechnic Institute and State University
Harry Joe	University of British Columbia, Canada
George Kimeldorf	University of Texas at Dallas
Samuel Kotz	University of Maryland
Naftali Langberg	Haifa University, Israel
Nicholas T. Longford	Educational Testing Service
James Lynch	University of South Carolina
Albert W. Marshall	University of British Columbia, Canada
Jie Mi	University of Pittsburgh
Yashaswini D. Mittal	Virginia Polytechnic Institute and State University
Magdy Metry	Ain Shams University, Egypt
Charles M. Newman	University of Arizona
Truc T. Nguyen	Bowling Green State University
Ingram Olkin	Stanford University
Shixian Qian	University of Pittsburgh
M.B. Rao	North Dakota State University
Yosef Rinott	Hebrew University, Israel
Tim Robertson	University of Iowa
Marco Scarsini	Universita Degli Studi Di Roma "La Sapienza", Italy
Moshe Shaked	University of Arizona
David Stoffer	University of Pittsburgh
Yung L. Tong	Georgia Institute of Technology
Richard A. Vitale	University of Connecticut
Lyn Whitaker	University of California at Santa Barbara
Takemi Yanagimoto	The Institute of Statistical Mathematics, Japan

Additionally, we would like to note that a majority of the talks were videotaped

to form a permanent record of the conference. Arrangements are being made to suitably archive these videotapes.

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H.W. Block, A.R. Sampson, T.H. Savits
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