

Preface

The present volume Decision Theory and Decision Systems is the outgrowth of the 17th Symposium über Operations Research. The Symposium was held in Hamburg in August 1992 and was organized by the editors, together with A. Karmann and G. Uebe.

One section of the symposium brought together researchers interested in current cross-disciplinary work in the fields Decision Theory under Risk and Uncertainty, Algorithms for Decision Problems, Knowledge-Based Systems, and Computer-Assisted Decision Support Systems. A special focus has been on preference models which employ non-additive probability and Choquet expected utility. While developing new approaches and concepts, all of this work is based on a firm mathematical foundation.

A selection of these presentations has been made, and their revised versions now form the content of this volume. Papers have been subdivided under four headings, namely: Modeling Beliefs and Preferences, Decision Support and Knowledge-Based Systems, Economics of Risk, and Algorithms for Decision Problems.

We would like to thank the many colleagues who helped us in selecting and preparing these contributions by working as anonymous referees. We also extend our thanks to Prof. P.L. Hammer for the opportunity to publish this volume in the Annals of Operations Research.

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Karl Mosler
Martin Schader
Editors