



dandelion.com

© 2008 AGI-Information Management Consultants  
May be used for personal purposes only or by  
libraries associated to dandelion.com network.

F R E I B E R G E R   F O R S C H U N G S H E F T E

Herausgegeben vom Rektor der Bergakademie Freiberg

D 197      Wirtschaftswissenschaften

Some Applications of Fuzzy Set Theory  
in Data Analysis II

(Edited by HANS BANDEMER)

With 10 figures



VEB Deutscher Verlag für Grundstoffindustrie · Leipzig

Contents

	pages
List of Authors	6
Preface	7
HANS BANDEMER and ANDRE KRAUT	
On fuzzy shape factors of fuzzy shapes	9
SIEGFRIED SCHMERLING and HANS BANDEMER	
Estimation of functional connections from fuzzy observations	27
MATTHIAS KUDRA	
Comparison of methods to evaluate fuzzy parameters in explicit functional relationships	43
WOLFGANG NÄTHER and BERNHARD WELLE	
Linear operations with fuzzy vectors	59
WOLFGANG NÄTHER	
Inference on a class of decomposable measures	69
MATTHIAS ALBRECHT and WOLFGANG NÄTHER	
Random closed fuzzy sets - an attempt to define a fuzzy Boolean model	78
WOLFGANG NÄTHER	
Fuzzy sets and fuzzy measures from the viewpoint of random sets	96
HANS BANDEMER	
Specification and use of neighbourhoods in fuzzy knowledge bases	112