

CONTENTS

IN MEMORY OF EDWIN T. JAYNES	vii
PREFACE.....	ix
MASSIVE INFERENCE AND MAXIMUM ENTROPY	
John Skilling.....	1
CV-NP BAYESIANISM BY MCMC	
Carlos Rodriguez	15
WHICH ALGORITHMS ARE FEASIBLE? A MAXENT APPROACH	
D. E. Cooke, V. Kreinovich, and L. Longpré.....	25
MAXIMUM ENTROPY, LIKELIHOOD AND UNCERTAINTY: A COMPARISON	
Amos Golan.....	35
PROBABILISTIC METHODS FOR DATA FUSION	
Ali Mohammed-Djafari.....	57
WHENCE THE LAWS OF PROBABILITY?	
Anthony J. M. Garrett.....	71
BAYESIAN GROUP ANALYSIS	
W. von der Linden, V. Dose, and A. Ramaswami.....	87
SYMMETRY-GROUP JUSTIFICATION OF MAXIMUM ENTROPY METHOD AND GENERALIZED MAXIMUM ENTROPY METHODS IN IMAGE PROCESSING	
Olga Kosheleva.....	101
PROBABILITY SYNTHESIS, HOW TO EXPRESS PROBABILITIES IN TERMS OF EACH OTHER	
Anthony J. M. Garrett.....	115
INVERSION BASED ON COMPUTATIONAL SIMULATIONS	
Kenneth Hanson, G. S. Cunningham, and S. S. Saquib.....	121
MODEL COMPARISON WITH ENERGY CONFINEMENT DATA FROM LARGE FUSION EXPERIMENTS	
R. Preuss, V. Dose, and W. von der Linden.....	137
DECONVOLUTION BASED ON EXPERIMENTALLY DETERMINED APPARATUS FUNCTIONS	
V. Dose, R. Fischer, and W. von der Linden.....	147
A BAYESIAN APPROACH FOR THE DETERMINATION OF THE CHARGE DENSITY FROM ELASTIC ELECTRON SCATTERING DATA	
A. Mohammad-Djafari and H. G. Miller.....	153

INTEGRATED DEFORMABLE BOUNDARY FINDING USING BAYESIAN STRATEGIES Amit Chakraborty and James Duncan.....	171
SHAPE RECONSTRUCTION IN X-RAY TOMOGRAPHY FROM A SMALL NUMBER OF PROJECTIONS USING DEFORMABLE MODELS Ali Mohammad-Djafari and Ken Sauer.....	183
AN EMPIRICAL MODEL OF BRAIN SHAPE James Gee and L. Le Briquer.....	199
DIFFICULTIES APPLYING BLIND SOURCE SEPARATION TECHNIQUES TO EEG AND MEG Kevin H. Knuth.....	209
THE HISTORY OF PROBABILITY THEORY Anthony J. M. Garrett.....	223
WE MUST CHOOSE THE SIMPLEST PHYSICAL THEORY: LEVIN-LI-VITÁNYI THEOREM AND ITS POTENTIAL PHYSICAL APPLICATIONS D. Fox, M. Schmidt, M. Koshelev, V. Kreinovich, L. Longpré, and J. Kuhn.....	239
MAXIMUM ENTROPY AND ACAUSAL PROCESSES: ASTROPHYSICAL APPLICATIONS AND CHALLENGES M. Koshelev.....	253
COMPUTATIONAL EXPLORATION OF THE ENTROPIC PRIOR OVER SPACES OF LOW DIMENSIONALITY Holly E. Fitzgerald and Everett G. Larson.....	263
ENVIRONMENTALLY-ORIENTED PROCESSING OF MULTI-SPECTRAL SATELLITE IMAGES: NEW CHALLENGES FOR BAYESIAN METHODS S. A. Starks and V. Kreinovich.....	271
MAXIMUM ENTROPY APPROACH TO OPTIMAL SENSOR PLACEMENT FOR AEROSPACE NON-DESTRUCTIVE TESTING R. Osegueda, C. Ferregut, M.J. George, J. M. Gutierrez, and V. Kreinovich.....	277
MAXIMUM ENTROPY UNDER UNCERTAINTY Henryk Gzyl.....	291
SUBJECT INDEX.....	296

