



# Contents

## H.F. Walker:

- Well-Posedness of Certain Elliptic Problems  
in Unbounded Domains ..... 1

## J.A. Donaldson:

- A Uniqueness Class for Two Improperly Posed  
Problems Arising in Mathematical Physics ..... 9

## S. Steinberg:

- Some Unusual Ill Posed Cauchy Problems and Their  
Applications ..... 17

## H.D. Meyer:

- Half-plane Representations and Harmonic  
Continuation ..... 24

## J.R. Cannon and R.E. Ewing:

- The Locations and Strengths of Point Sources ..... 39

## K. Miller:

- Efficient Numerical Methods for Backward Solution  
of Parabolic Problems with Variable Coefficients ..... 54

## H. Brezis and J.A. Goldstein:

- Liouville Theorems for Some Improperly Posed  
Problems ..... 65

## R.E. Showalter:

- Quasi-Reversibility of First and Second Order  
Parabolic Evolution Equations ..... 76

## J.R. Cannon:

- A Class of Inverse Problems: The Determination  
of Second Order Elliptic Partial Differential  
Operators from Over-Specified Boundary Data ..... 85

## H.A. Levine:

- Nonexistence of Global Weak Solutions to Nonlinear  
Wave Equations ..... 94

M. Ghil:

The Initialization Problem in Numerical Weather  
Prediction ..... 105

A. Carasso:

The Backward Beam Equation and the Numerical  
Computation of Dissipative Equations Backwards  
in Time ..... 124

