

数理解析研究所講究録 898

非線形発展方程式と
その応用

京都大学数理解析研究所

1995年2月

RIMS *Kokyuroku* 898

Nonlinear Evolution Equations
and Their Applications

February, 1995

Research Institute for Mathematical Sciences

Kyoto University, Kyoto, Japan

Preface

This volume collects most of the lectures delivered at the conference, *Nonlinear Evolution Equations and Their Applications*, held at Research Institute for Mathematical Sciences, Kyoto University, during July 19 - 21, 1993. Most of the lectures concerned the theory of nonlinear evolution equations, their applications to nonlinear partial differential equations and related topics in nonlinear partial differential equations. It is my pleasure to thank all those who cooperated to make this volume possible.

The conference was made possible by financial support from the Research Institute for Mathematical Sciences. I wish to thank the Institute for its support and for publishing these proceedings.

Hitoshi Ishii
Chuo University

January 26, 1995

非線形発展方程式とその応用

研究集会報告集

1993年 7月19日～ 7月21日

研究代表者 石井 仁司(Hitoshi Ishii)

目 次

1. DISCONTINUITY OF SOLUTIONS OF PARABOLIC INTEGRO-DIFFERENTIAL EQUATIONS WITH TIME DELAY IN HILBERT SPACE-----	1
神戸商船大・商船 丸尾 健二(Kenji Maruo)	
2. Periodic behavior of solutions to a continuous casting problem-----	13
千葉大・自然科学 篠田 淳一(Junichi Shinoda)	
3. The Carleman type estimates and non-well-posed problems-----	27
早稲田大・理工 堤 正義(Masayoshi Tsutsumi)	
4. Hartree方程式の解の漸近挙動について-----	44
阪大・理 和田 健志(Takeshi Wada)	
5. THE CAUCHY PROBLEM FOR A WEAKLY CLOSED OPERATOR-----	53
湘南工大・工 神田 茂雄(Shigeo Kanda)	
6. Linearised Stability for Abstract Quasilinear Evolution Equations of Parabolic Type II, Time Non Homogeneous Case-----	74
お茶の水女子大・理 古谷 希世子(Kiyoko Furuya)	
姫路工業大・理 八木 厚志(Atsushi Yagi)	
7. Normal form and global solutions for the Klein-Gordon-Zakharov equations-----	94
北大・理 小澤 徹(Tohru Ozawa)	
北大・理 津田谷 公利(Kimitoshi Tsutaya)	
東大・数理 堤 誉志雄(Yoshio Tsutsumi)	
8. On Instability in Geometric Evolution Equations-----	104
北大・理 儀我 美一(Yoshikazu Giga)	
北大・理 山内 和幸(Kazuyuki Yama-uchi)	
9. Periodic Solutions for Curve Evolution Equations-----	113
東京学芸大・数学 溝口 紀子(Noriko Mizoguchi)	
10. EXISTENCE OF NODAL SOLUTIONS FOR SEMILINEAR ELLIPTIC EQUATIONS-----	127
宮崎大・工 梶木屋 龍治(Ryuji Kajikiya)	

11. On the nonlinear degenerate elliptic PDEs with obstacles-----132

神戸商船大・商船 石井 克幸(Katsuyuki Ishii)

12. ON A LINEAR THERMOELASTIC PLATE EQUATION-----149

筑波大・数学 柴田 良弘(Yoshihiro Shibata)

* The proceedings of the following lectures were not available before the deadline.

The Laplace transform and evolution equations

Louisiana大・数学

F. Neubrander

The Cauchy problem for geometric wave equations

New York大・Courant研究所

J. Shatah