

数理解析研究所講究録 1545

微分方程式の粘性解理論とその発展

京都大学数理解析研究所

2007年4月

RIMS Kôkyûroku 1545

*Viscosity Solution Theory of Differential
Equations and its Developments*

April, 2007

Research Institute for Mathematical Sciences

Kyoto University, Kyoto, Japan

This is a report of research done at Research Institute for Mathematical Sciences, Kyoto University. The papers contained herein are in final form and will not be submitted for publication elsewhere.

Preface

This volume contains the proceedings of the lectures delivered at the conference, *Viscosity Solution Theory of Differential Equations and its Developments*, held at the Research Institute for Mathematical Sciences, Kyoto University, during May 31 - June 2, 2006. All the papers are concerned with recent developments in the theory of viscosity solutions and related topics in nonlinear partial differential equations.

The conference was possible by support from the Research Institute for Mathematical Sciences. Also, financial support from the Japan Society for the Promotion of Science through its Grant-in-Aid for Scientific Research was helpful for making the conference successful. I wish to thank the Research Institute for Mathematical Sciences and the Japan Society for the Promotion for their support and all those who cooperated to publish this volume.

Shigeaki Koike (Saitama University)
Hitoshi Ishii (Waseda University)
Yoshikazu Giga (University of Tokyo)
February, 2007

1 1.	RECENT ADVANCES IN THE THEORY OF ARONSSON EQUATIONS	-----	122
	U. Jyväskylä		Petri Juutinen
1 2.	UNIQUENESS AND EXISTENCE FOR SPIRAL CRYSTAL GROWTH	-----	136
	北海道教育大・札幌校(Hokkaido U. Edu.)		後藤 俊一(Shun'ichi Goto)
1 3.	ASYMPTOTIC SOLUTIONS FOR LARGE-TIME OF HAMILTON-JACOBI		
	EQUATIONS IN EUCLIDEAN n SPACE	-----	140
	早大・教育・総合科学(Waseda U.)		石井 仁司(Hitoshi Ishii)