

PREFACE

This volume is dedicated to Antonio Greco's influence and achievements, on his 65th birthday. It is an outgrowth from a conference on *Asymptotic Methods in Nonlinear Wave Phenomena* which was held in his honor in Mondello (Palermo) 5-7 June 2006.

Antonio has made significant contributions to the understanding of non-linear propagation phenomena and to symmetry group methods applied to PDEs arising in mathematical physics. Here we will just mention his research on completely exceptional hyperbolic systems and Von Karman's fluids; asymptotic waves; the interaction between gravitational and acoustic waves in relativistic fluid dynamics and the complete integrability of the generalized Kadomtsev-Petviashvili equation through the use of the Painlevé test and of the Lax pair.

His merit also includes the gathering in Palermo of a group of young and enthusiastic researchers sharing his vision and scientific interests. We believe that, under his leadership, this group will continue to grow and to accomplish even more ambitious goals.

Antonio Greco has held several administrative responsibilities. He has served as a Director of a CNR laboratory and is currently the Director of the Math Department and also the Principal Investigator of the unit of Palermo in the PRIN funding project. He has organized several successful international conferences and taught twice, in 1982 and in 1986, at the "Scuola Estiva di Fisica Matematica" in Ravello, the last being jointly taught with our unforgettable colleague and friend, Andrea Donato.

It is also a pleasure to mention Antonio's unique qualities which have made him a special man. He has a bright personality, a generous nature and it is always a pleasure being in his company.

We wish him all the best and to keep up the good work.

He will definitely remain as brotherly friend for the rest of our lives.

Tommaso Ruggeri and Marco Sammartino
January 2007