PREFACE

The *International Conference Zaragoza-Pau on Applied Mathematics and Statistics* is organized every two years by the *Departamento de Matemática Aplicada*, the *Departamento de Métodos Estadísticos*, both from the *Universidad de Zaragoza* (Spain), and the *Laboratoire de Mathématiques Appliquées*, from the *Université de Pau et des Pays de l'Adour* (France). The aim of this conference is to present recent works in Applied Mathematics and Statistics, putting special emphasis on subjects linked to petroleum engineering and environmental problems.

The Ninth Conference took place in Jaca (Spain) from 19th to 21st September 2005. The official opening ceremony was graced by the presence of the Chancellor of the University of Zaragoza, Excmo. Sr. Rector Mgfco. D. Felipe Pétriz, and the Chancellor of the University of Pau, M. le Président Michel Uhaldeborde. During those three days, 140 mathematicians, coming from different universities, research institutes or the industrial sector, attended 10 plenary lectures, 73 contributed talks and a poster session with a total of 20 posters. The principal topics were: theoretical and numerical analysis of deterministic models described by differential equations, statistics and stochastic processes, surface approximation and image analysis. Two special sessions were devoted to aero-thermo-dynamics, and diffusion, convection and porous media. In addition, the Conference was enriched by the presentation, by J. M. Campo, of the *Statistical Atlas of the Pyrenees*, and the exhibition M*arte*MÁTICAS, designed and carried out by F. Corbalán, who also gave a talk about *Statistics, Mathematics and Media*. These proceedings contain five papers based on the corresponding invited lectures along with 49 full length refereed research papers.

We would like to thank the following institutions for their regular financial and material support in our cooperation programs: Université de Pau et des Pays de l'Adour, Universidad de Zaragoza, Conseil Régional d'Aquitaine, Gobierno de Aragón, Conseil Régional de Midi-Pyrénées, Gobierno de Navarra, and Pyrenean Work Community. Thanks are also due to the Common Funds Aquitaine-Aragón and European Social Fund (ESF), for the grants specially allotted at the time of the Ninth Conference. Additional financial support was also provided by Instituto Aragonés de Estadística and Caja de Ahorros de la Inmaculada.

We wish to express our gratitude to Mohamed Amara (U. Pau), Mira Bozzini (U. Milano-Bicocca), Jacqueline Fleckinger (U. Toulouse 1), Raúl Gouet (U. Chile), Leandro Pardo (U. Comp. Madrid), Miguel Pasadas (U. Granada), and Miguel San Miguel (U. Zaragoza), who, together with us, formed the Scientific Committee, and Javier López, Irene Marín, and Pedro Mateo, from the University of Zaragoza, who shared with us the tasks of the Organizing Committee. We are also indebted to all others who helped in the organization of the conference, in particular, Cristina Palacios, María Palacios, Gerardo Sanz-Enguita and Enrique Cebrián.

We finally acknowledge the assistance provided for the realization of the proceedings by the Seminario Matemático García de Galdeano and the Servicio de Publicaciones of the University of Zaragoza, as well as the kind cooperation of the referees.

Breaking for the first time the two-year periodicity of the Conference, its tenth edition will take place in September 2008, since two related events will fill the calendar in 2007. The first one is the *First French-Spanish Mathematical Congress*, which will be held in Zaragoza,

from 9th to 13th July 2007. This conference will host two specific sessions about research topics common to the Universities of Zaragoza and Pau. The second event is an *International Workshop on Statistics, Probability and Operations Research* that will take place in Jaca, from 12th to 15th September 2007, co-organized, among others, by the Universities of Zaragoza and Pau. All of you are cordially invited to participate in one or all of the above-mentioned events.

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Zaragoza and Pau, December 2006

The Editors

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