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Preface

We are glad to present the proceedings of the IPMU 2012 conference (International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems) held in Catania, Italy, during July 9–13, 2012. The IPMU conference is organized every two years with the focus of bringing together scientists working on methods for the management of uncertainty and aggregation of information in intelligent systems. This conference provides a medium for the exchange of ideas between theoreticians and practitioners in these and related areas. This was the 14th edition of the IPMU conference, which started in 1986 and has been held every two years in the following locations in Europe: Paris (1986), Urbino (1988), Paris (1990), Palma de Mallorca (1992), Paris (1994), Granada (1996), Paris (1998), Madrid (2000), Annecy (2002), Perugia (2004), Paris (2006), Malaga (2008), Dortmund (2010). Among the plenary speakers of past IPMU conferences there are three Nobel Prize winners: Kenneth Arrow, Daniel Kahneman, Ilya Prigogine.

The program of IPMU 2012 consisted of six invited talks together with 258 contributed papers, authored by researchers from 36 countries, including the regular track and 35 special sessions. The invited talks were given by the following distinguished researchers: Kalyanmoy Deb (Indian Institute of Technology Kanpur, India), Antonio Di Nola (University of Salerno, Italy), Christophe Marsala (Université Pierre et Marie Curie, France), Roman Slowinski (Poznan University of Technology, Poland), Tomohiro Takagi (Meiji University, Japan), Peter Wakker (Erasmus University, The Netherlands). Michio Sugeno received the Kampé de Fériet Award, granted every two years on the occasion of the IPMU conference, in view of his eminent research contributions to the handling of uncertainty through fuzzy measures and fuzzy integrals, and fuzzy control using fuzzy systems.

The success of such an event is mainly due to the hard work and dedication of a number of people and the collaboration of several institutions. We want to acknowledge the help of the members of the International Program Committee, the additional reviewers, the organizers of special sessions, and the volunteer students. All of them deserve many thanks for having helped to attain the goal of providing a balanced event with a high level of scientific exchange and a pleasant environment. A special mention is deserved by Silvia Angilella, Salvatore Corrente, Fabio Rindone, and Giuseppe Vaccarella, who contributed greatly to the organization of the conference and especially to the review process.

We acknowledge the use of the EasyChair conference system for the paper submission and review. We would also like to thank Alfred Hofmann and Leonie Kunz, and Springer, for providing continuous assistance and ready advice whenever needed.

May 2012

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