

Preface

This volume is a collection of lecture notes presented at the School on Singularity Theory, São Carlos, Brazil, July 16-21, 2012 and at the 12th International Workshop on Real and Complex Singularities, São Carlos, Brazil, July 22-27, 2012. The workshop was a part of a highly successful series of biennial conferences organized by the Singularity Theory Group at São Carlos, University of São Paulo, Brazil. It is the longest running sequence of international workshops in singularities, which have been providing an ideal opportunity for both young researchers and established leaders working in the field to meet together in a very productive scientific atmosphere.

The meeting in 2012 had a special dedication – to Shyuichi Izumiya’s 60th birthday. Shyuichi Izumiya, professor of Hokkaido University, Japan, is one of the leading experts in singularity theory and its applications. Besides the basic singularity theory, Shyuichi also works on application of singularity theory to other disciplines including differential equations, differential geometry and mathematical physics, by his original ideas. He is of active and of attractive personality, and he has worldwide collaborations with many mathematicians. He has participated in almost all workshops organized by the Singularity Theory Group at São Carlos. Shyuichi has inspired and continues to inspire, in particular, a lot of young mathematicians. In fact, amongst his more than 140 published researches, Shyuichi has more than 70 joint papers with young collaborators.

This meeting started from the week of the School and continued to the week of the International Workshop. A total of about 170 participants from 15 countries (Brazil, China, France, Germany, Hungary, India, Italy, Japan, Mexico, Poland, Portugal, Spain, Turkey, UK, USA) came to the meeting to celebrate Shyuichi’s 60th birthday.

The Scientific Committee was composed of Lev Birbrair (Federal University of Ceará, Brazil), Maria del Carmen Romero Fuster (University of Valencia, Spain), Goo Ishikawa (Hokkaido University, Japan), Abramo Hefez (Federal University of Fluminense, Brazil), Stanisław Janeczko (Polish Academy of Sciences and Warsaw University of Technology, Poland), Maria Aparecida Soares Ruas (University of São Paulo, Brazil), Marcio Soares (Federal University of Minas Gerais, Brazil), David Trotman (University of Marseille, France) and Masaaki Umehara (Tokyo Institute of Technology, Japan).

Thanks are due to many people and institutions crucial in the realization of both the school and the workshop. We start by thanking the Organizing Committee: Roberto Callejas Bedregal, Fabio Scarco