Introduction

In this volume we present the proceedings of the conference "New Trends in Dynamical Systems" held in Salou, Catalonia, from October 1st to 5th, 2012. This international event was devoted to celebrate Jaume Llibre's 60th birthday.

The meeting was organized by the Dynamical Systems Group of the Universitat Autònoma de Barcelona, that is leaded by Jaume Llibre and has members distributed over most of the Catalonian universities.

The main topics of the conference were Celestial Mechanics, Discrete Dynamical Systems, and Qualitative Theory of Differential Equations with emphasis on the *n*-body problem, central configurations, integrability, surface diffeomorphisms, topological, complex, combinatorial, and chaotic dynamics, 16th Hilbert's problem, periodic orbits, perturbation theory, period function, and the Jacobian conjecture. All these subjects were distributed in 9 plenary talks, 22 contributed talks, and 50 posters.

We gathered together 144 experts in Dynamical Systems from Algeria, Austria, Belgium, Brazil, Canada, Chile, Czech Republic, Egypt, France, Germany, Iran, Israel, Italy, Mexico, Nigeria, Norway, Poland, Portugal, P. R. China, Romania, Russia, Spain, Sweden, UK, United Arab Emirates, and USA.

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