PREFACE

The XV^{th} International Conference on Geometry, Integrability and Quantization is a non-singular event. This annual conference became an important milestone in the field of mathematics and theoretical physics, a needed continuation of a series of successful events that began at Sts. Constantine & Elena Resort (near Varna, Bulgaria) in September 1999. The conference series is organized by the Bulgarian Academy of Sciences with gracious assistance at times from the European Mathematical Society, and many other universities in the world. This year the conference was organized by the Bulgarian Academy of Science in collaboration with Embry-Riddle Aeronautical University (Daytona, USA) and Tokyo University of Science (Tokyo, Japan). These meetings aim to provide a forum for researchers working on the closely related domains of integrability, quantization, geometry, symmetries, gravitation and relativity, field theory and elementary particles, biophysics and biomathematics, nonlinear science and partial differential equations.

The previous meetings were very well received and established a vivid and increasing cooperation between mathematicians, physicists, and researchers in all the above mentioned fields. For pure mathematicians the field of theoretical physics was always the rich source of interesting structures, new problems, and open questions requiring a systematic approach. For the physicists and computer researchers the interaction with pure mathematicians represents a source of enhancing specific and deeper technical knowledge and a platform for exchanging problems and for abstract research on theoretical fundamentals. All together this type of collaboration between mathematics oriented scholars was always a great provider of new insights.

With the organization of the 2013 Conference we hope to have contributed at further progress in the topics diffusing on both sides of the boundary between symmetries and quantization. Papers were sought in a wide spectrum of areas, for instance conservation laws, Darboux and Berezin transformation, group analysis of equations, Hamiltonian structure and integration on Lie groups, Rodrigues vectors in relativity, Grassmannian Sigma models, superconductivity, nonlinear equations of NLS type on Grassmann algebras, recursion operators, supergravitation, Hodge theory, magnetic Kepler problems, special elastic curves and solutions, and many others.