PREFACE

The Sixth International Conference on Geometry, Integrability and Quantization took place at the Sts. Contantine and Elena resort on the Black Sea coast of Bulgaria from June 3th to June 10th, 2004.

The talks dealt with Isochronous Systems, Lie Systems of Differential Equations and Connections on Principal Fibre Bundles, Nonadiabatic Geometrical Angles in Nuclear Magnetic Resonance, Modern Aspects of Soliton Theory, A Factorization Method for Second Order Functional Equations, Symmetry Approach and Exact Solutions in Hydrodynamics, the Multicomponent NLS Type Models and their Gauge Equivalents, Connections Associated with Three-Component Distributions, a Mathematical Model of Cole's Experiment, Orbital Invariants and Modular Forms, Integrability and Explicit Solutions to the Nonuniform Quantum Spin Lattices, Intrinsic Dynamics of Manifolds and Quantization, Holzapfel's Conjecture on Ball Quotient Surfaces, Quantum Field Theory in Curved Spacetime, Real Form Dynamics in Finite Dimensions, Stochastic Field Theories, Special Weingarten Surfaces, Banach Lie-Poisson Spaces and Quantization, Finding the Zeros of the Functions Defined by q-Integrals, The Kepler Problem and its Superintegrable Relatives in Spaces of Constant Curvature, Exactly Solvable Models for the Investigation of Dynamical Quantum Systems, Integrable Quaternionic Structures, Finite Orthogonal Polynomials and Integrable Multiboson Systems, Canonical Bases for Real Representations of Clifford Algebras, Description of all Conformally Invariant Differential Operators Acting on Scalar Functions, Symmetries and Conservation Laws of Plates and Cylindrical Shells Interacting with Fluid Flow, Single-valued and Multi-valued Solutions for the Generalized Henon-Heiles System with an Additional non-polynomial Term, Prolongation Structures and Integrability of the Coupled KdV-mKdV System.

Continuing a, by now, 6-year tradition, the summer school brought together researchers who, while sharing common scientific interests, are frequently separated by barriers, both scientific (such as the barrier between physicists and mathematicians or the barrier between those with an algebraic approach and those with a differential-equations or geometrical approach) and geographical (with participants coming from many of the countries of both Eastern and Western Europe and also adjacent areas of Asia and Africa). The summer school offered many opportunities for breaking down these barriers, not only during the often lively discussion after each of the lectures, but continuing over meals and in break-times and continuing further during the excursion to nearby historical and natural sites, as well as on the beach.