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Titolo	Differential Equations and Quantum Groups [[electronic resource]] : Andrey A. Bolibrukh Memorial Volume / / Daniel Bertrand, Benjamin Enriquez, Claude Mitschi, Claude Sabbah, Reinhard Schafke
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Classificazione	14-xx20-xx32-xx35-xx
Soggetti	Differential equations Groups & group theory Algebraic geometry Group theory and generalizations Several complex variables and analytic spaces Partial differential equations
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Nota di contenuto	Realization of irreducible monodromy by Fuchsian systems and reduction to the Birkhoff standard form (by Andrey Bolibrukh) / Yulij Ilyashenko -- The work of Andrey Bolibrukh on isomonodromic deformations / Claude Sabbah -- Two notions of integrability / Michele Audin -- Formal power series solutions of the heat equation in one spatial variable / Werner Balser -- Multiplicity of critical points of master functions and Schubert calculus / Prakash Belkale, Evgeny Mukhin, Alexander Varchenko -- Some explicit solutions to the Riemann-Hilbert problem / Philip Boalch -- Galois theory of parameterized differential equations and linear differential algebraic groups / Phyllis J. Cassidy, Michael F. Singer -- On the reductions and classical solutions of the Schlesinger equations / Boris Dubrovin, Marta Mazzocco -- On the Riemann-Hilbert correspondence for generalized Knizhnik-Zamolodchikov equations for different root systems / Valentina Golubeva -- Monodromy groups of regular systems on the Riemann sphere / Vladimir Petrov Kostov -- Monodromy of Cherednik-

Kohno-Veselov connections / Vladimir P. Leksin -- Invitation to Galois theory / Hiroshi Umemura.

Sommario/riassunto

This special volume is dedicated to the memory of Andrey A. Bolibrukh. It contains two expository articles devoted to some aspects of Bolibrukh's work, followed by ten refereed research articles. Topics cover complex linear and nonlinear differential equations as well as quantum groups: monodromy, Fuchsian linear systems, Riemann-Hilbert problem, differential Galois theory, differential algebraic groups, multisummability, isomonodromy, Painleve equations, Schlesinger equations, integrable systems, KZ equations, complex reflection groups, root systems.
