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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- Spectral/quadrature duality: Picard-Vessiot theory and finite-gap potentials -- 1. Introduction -- 2. Background -- 3. Integrability of equation (1) by Picard-Vessiot -- 4. Spectral/quadrature duality. An integration procedure -- 5. The $I?$ -functons -- 6. Integration as a linearly exponential $I?$ -extension -- 7. Integrability and differential closedness -- 8. Definition of through Liouvillian extension -- 9. Non-finite-gap integrable counterexamples -- 10. Concluding remarks -- References -- Darboux transformation, exceptional orthogonal polynomials and information theoretic measures of uncertainty -- 1. Introduction -- 2. A brief outline of supersymmetric quantum mechanics -- 3. EOP's associated with broken supersymmetry -- 4. Relation with higher order Darboux transformation -- 5. Information-theoretic lengths for the partner potential of linear harmonic oscillator via supersymmetry -- 6. Moment of the quantum mechanical states associated with the partner of harmonic oscillator via supersymmetry -- 7. Discussion: -- References -- On orthogonal polynomials spanning a non-standard

flag -- 1. Introduction -- 2. Preliminaries -- 3. Codimension 1 flags
-- 4. Higher codimension flags -- Acknowledgements -- References
-- On the Supersymmetric Spectra of two Planar Integrable Quantum
Systems -- 1. Introduction -- 2. =2 supersymmetric planar quantum
systems -- 3. The planar quantum Kepler/Coulomb problem and
supersymmetry -- 4. The planar quantum Euler/Coulomb problem and
supersymmetry -- 5. Two center collapse in one center -- 6. Further
comments -- Acknowledgements -- References -- Solvable rational
extension of translationally shape invariant potentials -- Introduction
-- 1. Solvable rational extensions of the harmonic oscillator -- 2.
Second category potentials -- 3. Conclusion -- Acknowledgments --
References -- The pentagram map: geometry, algebra, integrability --
1. Introduction: The pentagram map -- 2. Complete integrability of the
pentagram map on the space \mathbb{C}^n -- 3. Relation to the Boussinesq
equation -- 4. The space \mathbb{C}^n and 2-frieze patterns --
Acknowledgments -- References -- Jet Bundles, symmetries, Darboux
transforms -- Elliptic beta integrals and solvable models of statistical
mechanics.
