1. Record Nr. UNINA9910300244703321

Titolo	Geometric Methods in Physics : XXXIII Workshop, Biaowiea, Poland, June 29 – July 5, 2014 / / edited by Piotr Kielanowski, Pierre Bieliavsky, Anatol Odzijewicz, Martin Schlichenmaier, Theodore Voronov
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2015
ISBN	3-319-18212-9
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (322 p.)
Collana	Trends in Mathematics, , 2297-024X
Disciplina	530.120151474
Soggetti	Group theory Global analysis (Mathematics) Manifolds (Mathematics) Quantum computers Group Theory and Generalizations Global Analysis and Analysis on Manifolds Quantum Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Preface -- Part I: Higher Structures and Non-commutative Geometry -- S. Azzali, C. Lévy, C. Neira-Jiménez and S. Paycha: Traces of Holomorphic Families of Operators on the Noncommutative Torus and on Hilbert Modules -- D. Bashkirov and A. Voronov: r- Matrices, Triangular L- Bialgebras, and Quantum Groups -- R. Fernandes: Normal Forms and Lie Groupoid Theory -- M. Markl: Higher Braces via Formal (Non)commutative Geometry -- A. Sitarz: Conformally Rescaled Noncommutative Geometries -- Part II: Quantm Mechanics and Field Theory -- S. Twareque Ali: On Some Quaternionic Coherent States and Wavelets -- I. Aremua, E. Baloïtcha and M. N. Hounkonnou: Supersymmetric Vector Coherent States for Systems with Zeeman Coupling and Spin-orbit Interactions -- D.S. Kaparulin and S.L. Lyakhovich: Energy and Stability of Pais-Uhlenbeck Oscillator -- Yoshiaki Maeda, Akifumi Sako, Toshiya Suzuki and Hiroshi Umetsu: Deformation Quantization with Separation of Variables and Gauge

Theories -- Ali Mostafazadeh: Physics of Spectral Singularities -- Armen Sergeev: On the Moduli Space of Yang-Mills Fields on ^4 -- A. A. Sharapov: On Covariant Poisson Brackets in Field Theory -- Part III: Groups and Algebras -- G. Chadzitaskos, L. Háková and O. Kajínek: Weyl Group Orbit Functions in Image Processing -- V.F. Molchanov: Poisson and Fourier Transforms for Tensor Products and an Overalgebra -- N. Moshchevitin: Unipotent Flow on SL2()\SL2(): from Dynamics to Elementary Number Theory -- Martin Schlichenmaier: Lie Superalgebras of Krichever-Novikov Type -- E.G. Vishnyakova: On n-ary Lie algebras of type (r; l) -- Part IV: Integrable Systems and Special Functions -- A. Dobrogowska and G. Jakimowicz: The class of (q; h) – Hahn Orthogonal Polynomials -- A. Dobrogowska and T. Goliski: Examples of Hamiltonian Systems on theSpace of Deformed Skew-symmetric Matrices -- Y. A. Neretin: Matrix Beta-integrals: an Overview -- A. Savin and B. Sternin: Differential Equations on Complex Manifolds -- E. Schmeidel, J. Zonenberg and B. upiska: Asymptotic Properties of Solutions of Neutral Type Difference System with Delays -- E. Shemyakova: Orbits of Darboux Groupoid for Hyperbolic Operators of Order Three -- Part V: Special Economic Session -- B. Mielnik: From Nicolaus Copernicus Economical Law up to the Present Day Economic Disasters -- . Hardt: Economics – Physics of Social Sciences or Art?.

Sommario/riassunto

This book presents a selection of papers based on the XXXIII Biaowiea Workshop on Geometric Methods in Physics, 2014. The Biaowiea Workshops are among the most important meetings in the field and attract researchers from both mathematics and physics. The articles gathered here are mathematically rigorous and have important physical implications, addressing the application of geometry in classical and quantum physics. Despite their long tradition, the workshops remain at the cutting edge of ongoing research. For the last several years, each Biaowiea Workshop has been followed by a School on Geometry and Physics, where advanced lectures for graduate students and young researchers are presented; some of the lectures are reproduced here. The unique atmosphere of the workshop and school is enhanced by its venue, framed by the natural beauty of the Biaowiea forest in eastern Poland. The volume will be of interest to researchers and graduate students in mathematical physics, theoretical physics and mathematmtics.