Proceedings of Symposia in
PURE MATHEMATICS

Volume 103.1

Integrability, Quantization, and Geometry
I. Integrable Systems

Dedicated to the Memory of Boris Dubrovin
1950–2019

Sergey Novikov
Igor Krichever
Oleg Ogievetsky
Senya Shlosman
Editors

AMS AMERICAN MATHEMATICAL SOCIETY
Providence, Rhode Island

Contents

VOLUME 1. Integrable Systems

Primitive forms without higher residue structure and integrable hierarchies (I)
K. ALESHKIN and K. SAITO 1

Solutions of BC_n type of WDVV equations
M. ALKADHEM, G. ANTONIOU, and M. FEIGIN 39

Topology of the Stokes phenomenon
P. P. BOALCH 55

Equivariant quantum differential equation and qKZ equations for a projective space: Stokes bases as exceptional collections, Stokes matrices as Gram matrices, and B-Theorem
G. COTTI and A. VARCHENKO 101

Meromorphic connections over F-manifolds
L. DAVID and C. HERTLING 171

Canonical maps and integrability in $T\bar{T}$ deformed 2d CFTs
G. JORJADZE and S. THEISEN 217

Incarnations of XXX $\widehat{\mathfrak{sl}_N}$ Bethe ansatz equations and integrable hierarchies
I. KRICHEVER and A. VARCHENKO 239

The Kowalewski separability conditions
F. MAGRI 297

On the Liouville integrable reduction of the associativity equations in the case of three primary fields
O. I. MOKHOV and N. A. STRIZHOVA 317

Hurwitz numbers from matrix integrals over Gaussian measure
S. M. NATANZON and A.YU. ORLOV 337

Spin Calogero-Moser models on symmetric spaces
N. RESHETIKHIN 377

Quantum Toda lattice: a challenge for representation theory
M. SEMENOV-TIAN-SHANSKY 403

Finite-gap solutions of the Mikhalëv equation
A. O. SMIRNOV, M. V. PAVLOV, V. B. MATVEEV, and V. S. GERDJIKOV 429

Flat coordinates on orbit spaces: from Novikov algebras to cyclic quotient singularities
I. A.B. STRACHAN 451

Cubic Hodge integrals and integrable hierarchies of Volterra type
K. TAKASAKI 481

Gauged Witten equations and adiabatic limit
G. TIAN and G. XU 503