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Solvable Lattice Models 2004

- Recent Progress on Solvable Lattice Models -

可解格子模型の最近の進展

京都大学数理解析研究所

2006年4月

Solvable Lattice Models 2004

- Recent Progress on Solvable Lattice Models -

RIMS. Kyoto Univ., Kyoto, Japan,
20-23 July, 2004

Workshop held as a part of RIMS Project Research 2004
"Method of Algebraic Analysis in Integrable Systems"

Tuesday 20 July :

10:00 - 10:50 **B. McCoy (SUNY, Stony Brook)**,
New development in the 8 vertex model.

11:00 - 11:50 **V. Terras (CNRS, Montpelier)**,,
Quantum inverse scattering approach to correlation functions of the XXZ model I : Fundamental blocks.

11:50 - 14:00 Lunch Time

14:00 - 14:40 **M.J. Martins (Universidade Federal de Sao Carlos)**,
R-matrices and Spectrum of Vertex Models based on Superalgebras.

14:50 - 15:30 **O. Foda (Univ. Melbourne)**,
Six Vertex Model with domain wall boundary condition

15:30 - 16:00 Tea Break

14:50 - 15:30 **Y. Takeyama (Univ. Tsukuba)** ,
A recursion formula for the correlation functions of an inhomogeneous XXX model.

16:50 - 17:30 **R. Sakamoto (Univ. Tokyo)**,
Jack symmetric functions powewr sums and representation of the Virasoro algebra.

Wednesday 21 July :

10:00 - 10:50 **C. Korff (SUNY, Stony Brook)**,
Baxter's auxiliary matrices and the algebraic Bethe ansatz.

11:00 - 11:50 **N. Kitanine (Univ. Cergy-Pontoise)** * :
Quantum inverse scattering approach to correlation functions of the XXZ model II : Two point correlation functions.

11:50 - 14:00 Lunch Time

14:00 - 14:40 **M. Batchelor (Australian National University)**,
Real applications of solvable lattice models.

14:50 - 15:30 **M.J. Martins (Universidade Federal de Sao Carlos)**,
$SU(N)$ Vertex models with non-diagonal boundaries.

15:30 - 16:00 Tea Break

16:00 - 16:40 **J. Shiraishi (Univ. Tokyo)**,
Commutative family of integral transformations and matrix elements of the vertex operators for Baxter's eight-vertex model.

16:50 - 17:30 **T. Deguchi (Ochanomizu Univ.)**,
Drinfeld polynomials associated with the XXZ Bethe states at roots of unity and the sl_2 loop algebra.

Thursday 22 July :

10:00 - 10:50 **Y. Pugai (Landau Institute)**,
On chiralities and descendants.

11:00 - 11:50 **J.-M. Maillet (CNRS, ENS Lyon)**,
Quantum inverse scattering approach to correlation functions of the XXZ model III : Master equation for correlation functions.

11:50 - 14:00 Lunch Time

14:00 - 14:40 **S. Kakei (Rikkyo univ.),**
Symmetry of elliptic root system and Askey-Wilson polynomials.

14:50 - 15:30 **K. Takemura (Yokohama City Univ.),**
On eigenvalues of Lamé operator.

15:30 - 16:00 Tea Break

16:00 - 16:40 **Y. Hara,**
Remarks on the Wakimoto representation for $U_q(\widehat{sl}_2)$.

16:50 - 17:30 **Y. Komori (Nagoya Univ.),**
Elliptic Ruijsenaars operators and elliptic hypergeometric integrals

Friday 23 July :

10:00 - 10:50 **M. Lashkevich (Landau Institute),**
From form factors of exceptional fields for two parametric family of integrable models.

11:00 - 11:50 **N.A. Slavnov (Steklov Mathematical Institute),**
Quantum inverse scattering approach to correlation functions of the XXZ model IV : Dynamical correlation functions.

11:50 - 14:00 Lunch Time

14:00 - 14:40 **H. Konno (Hiroshima Univ.),**
Fusion 8-vertex Model and Elliptic Quantum Group

14:50 - 15:30 **Y-H. Quano (Suzuka Univ. Medical Science),**
Form factors, correlation functions and vertex operators in the eight-vertex model at reflectionless points,

16:00 - 16:40 **M.J. Rodriguez-Plaza (Univ. Comp. Madrid),**
Reciprocal equations and "non-Bethe" states

- Informations of this conference are avaibable from

  `http://www.ms.u-tokyo.ac.jp/~mnishi/slm2004/index.html`.

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研究集会報告集

２００４年７月２０日～７月２３日

研究代表者　白石　潤一 (Junichi Shiraishi)

副代表者　山田　裕二 (Yuji Yamada)

〃　武部　尚志 (Takashi Takebe)

〃　西澤　道知 (Michitomo Nishizawa)

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