Mathematical structures of integrable systems, its deepening and expansion

September 9～11, 2019

edited by Takao Suzuki

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Preface

This volume is the proceedings of the conference "Mathematical structures of integrable systems, its deepening and expansion" which was held at the Research Institute for Mathematical Sciences (RIMS) of Kyoto University from September 9 to September 11, 2019. The aim of the conference was to connect researchers working on classical or quantum integrable systems with professions working on various mathematical objects such as combinatorics, applied mathematics, algebraic geometry, number theory, etc. There were 13 lectures and 60 participants during the conference. It is my pleasure that this volume collects 11 contributions from the speakers. All papers have been refereed and are in their final forms.

I would like to express my gratitude to all participants, invited speakers and RIMS secretaries who have made the conference successful. I also appreciate the helps of anonymous referees.

August, 2021

Takao Suzuki

Program

RIMS Workshop 2019
Mathematical structures of integrable systems, its deepening and expansion
RIMS 共同研究（公開型）2019
「可積分系数理の深化と展開」

September 9 (Mon)

- 13:40 – 14:30　執行 洋子
KP 階層のタウ関数の展開係数について

- 14:40 – 15:30　渋川 元樹
補間 Jack 多項式の高階差分方程式

- 15:50 – 16:40　大野 泰生
多重ゼータ値の母関数について

September 10 (Tue)

- 9:30 – 10:20　中田 庸一
超離散常差分方程式の初期値問題の多面体を用いた計算

- 10:30 – 11:20　高崎 金久
３次ホッジ積分の可積分構造

- 11:40 – 12:30　岩木 耕平
Painlevé τ-函数と位相的漸化式

- 1:40 – 14:30　前田 一貴
箱玉系と非自励離散戸田格子

- 14:40 – 15:30　竹縄 知之
いくつかの 4 次元パンルヴェ方程式系の初期値空間

- 15:50 – 16:40　野海 正俊
楕円 Ruijsenaars 差分作用素の形式的固有函数

September 11 (Wed)

- 10:30 – 11:20　渡邉 扇之介
Max-plus ウォーク　〜超離散版量子ウォークの構築〜

- 11:30 – 12:20　木村 嘉之
量子冪単胞の量子捻り自己同型と双対標準基底

- 13:40 – 14:30　山田 泰彦
因子化されたラックス行列の対称性

- 14:40 – 15:30　津田 照久
Mutation Combinatorics in Cluster Algebras and q-Painlevé Equations

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RIMS Kôkyûroku Bessatsu