

## Tentative Program on Monday 12 November

9:15–9:25

**Opening Address:** Masato Wakayama (Executive Vice President, Kyushu University)

9:25–9:30

**Opening Remarks:** Kenji Kajiwara (Chair of the Organizing Committee)

9:30–10:00

**Masatoshi Noumi:** Elliptic hypergeometric integrals and associated determinant formulas

10:00–10:30

**Tomohiro Sasamoto:** Discrete KPZ model and Frobenius determinant

10:30–10:50

*Coffee Break*

10:50–11:20

**Reinout Quispel:** Finding preserved measures and integrals of integrable and non-integrable maps

11:20–11:50

**Luc Vinet:** Difference and  $q$ -difference Heun equations

11:50–12:20

**Rei Inoue:** Cluster realization of Coxeter groups and its application

12:20–14:30

*Lunch Break*

14:30–15:00

**Nalini Joshi:** Hidden solutions of discrete systems

15:00–15:30

**Yoshitsugu Takei:** Stokes phenomena and connection formulas for some discrete Painlevé equations

15:30–16:00

**Yousuke Ohyama:**  $q$ -Stokes phenomenon on basic hypergeometric series

16:00–16:20

*Coffee Break*

16:20–16:50

**Claire R. Gilson:** Quasi-pfaffian identities and noncommutative discrete integrable systems

16:50–17:20

**Andrew P. Kels:** Hypergeometric integrals, Yang-Baxter equations, and 3D-consistent equations

17:20–17:50

**Da-jun Zhang:** Rational solutions to quadrilateral equations

17:50–18:20

**Jarmo Hietarinta:** Integrability of quad equations: CAC vs. BT

## Tentative Program on Tuesday 13 November

9:15–9:45

**Masataka Kanki:** Coprimeness property of the Toda type equations over multi-dimensional lattices

9:45–10:15

**Jianzhi Cheng:** Degree growth and special solutions of discrete equations

10:15–10:45

**Takafumi Mase:** Dynamical degrees and singularity patterns

10:45–11:05

*Coffee Break*

11:05–11:35

**Giorgio Gubbiotti:** Growth, invariants, Lagrangians and integrability for four-dimensional recurrence relations

11:35–12:05

**Anton Shchepochkin:** Bilinear relations on  $q$ -Virasoro conformal blocks and Painlevé  $A_7^{(1)'}$  equation

12:05–12:35

**Kanehisa Takasaki:** Toda and  $q$ -Toda equations for Nekrasov partition functions

12:35–14:30

*Lunch Break*

14:30–15:00

**Pavlo Gavrylenko:** Deautonomization of cluster integrable systems

15:00–15:30

**Takao Suzuki:** Cluster algebra and generalized  $q$ -Painlevé VI systems of type  $A$

15:30–16:00

**Joe Pallister:** Linearisability and integrability of cluster maps from affine Dynkin diagrams

16:00–16:20

*Coffee Break*

16:20–16:50

**Basil Grammaticos:** A panoramic view of discrete Painlevé equations: from  $E_8^{(1)}$  to  $A_1^{(1)}$  and back

16:50–17:20

**Anton Dzhamay:** Gap probabilities in tiling models and discrete Painlevé equations

17:20–17:30

*Short Break*

17:30–19:30

**Poster Advertisement Session**

## Tentative Program on Wednesday 14 November

9:15–9:45

**Xing-Biao Hu:** Discrete integrable systems and their links to numerical algorithms and orthogonal polynomials

9:45–10:15

**Andrew Hone:** Continued fractions and hyperelliptic curves

10:15–10:45

**John A. G. Roberts:** Birational maps over finite fields and probabilistic models for their dynamics

10:45–11:05

*Coffee Break*

11:05–11:35

**Shaoshi Chen:** Local and global aspects of D-finite functions

11:35–12:05

**Lucia Di Vizio:** Reduced differential systems and calculation of the Lie algebra of the differential Galois group

12:05–12:35

**Claude-Michel Viallet:** Singularity analysis of maps beyond 2 dimensions

12:35–13:05

**Tomoyuki Takenawa:** The space of initial conditions for some 4D Painlevé systems

13:05–

*Lunch and Excursion*

## Tentative Program on Thursday 15 November

9:15–9:45

**Wolfgang K. Schief:** Integrable discretisation of hodograph-type systems, Abelian integrals and Whitham equations

9:45–10:15

**Boris G. Konopelchenko:** Integrable structure in the discrete 4-dimensional Plebanski equation

10:15–10:45

**Sanjay Ramassamy:** Miquel dynamics on circle patterns

10:45–11:00

*Coffee Break*

11:00–14:30

Poster Session and *Lunch*

14:30–15:00

**Wayne Rossman:** Surface discretization and Lie sphere geometry

15:00–15:30

**Shizuo Kaji:** A linkage mechanism that follows a discrete sine-Gordon/mKdV equation

15:30–16:00

**Elizabeth Mansfield:** Difference moving frames and its applications

16:00–16:20

*Coffee Break*

16:20–16:50

**Simon Ruijsenaars:** On hyperbolic, trigonometric and rational specialisations of van Diejen's relativistic Heun operator: Progress towards their Hilbert space versions and eventual  $E_8$  spectral invariance

16:50–17:20

**Satoru Odake:** Dual polynomials of the multi-indexed ( $q$ -)Racah orthogonal polynomials

17:20–17:50

**Kerstin Jordaan:** A characterization of Askey-Wilson polynomials

17:50–18:20

**Alexei Zhedanov:** Askey-Wilson algebra and a generalization of the Heun operators

19:30??–

*Banquet*

## Tentative Program on Friday 16 November

9:30–10:00

**Masato Okado:** Integrable systems arising from Kirillov-Reshetikhin crystals of quantum affine algebras

10:00–10:30

**Hitoshi Konno:** Elliptic stable envelopes and finite-dimensional representation of elliptic quantum group

10:30–10:50

*Coffee Break*

10:50–11:20

**Ayumu Hoshino:** Macdonald polynomials of type  $C_n$  with one-column diagrams and deformed Catalan numbers

11:20–11:50

**Makiko Sasada:** Dynamics of the box-ball system with random initial conditions via Pitman's transformation

11:50–12:20

**Rod Halburd:** The Carlitz derivative and integrable systems in finite characteristic

12:20–14:20

*Lunch Break*

14:20–14:50

**Decio Levi:** Conditional symmetry preserving discretizations: the Boussinesq equation

14:50–15:20

**Yasuhiko Yamada:** On  $q$ -Garnier systems

15:20–15:50

**Yuri B. Suris:** Billiards in confocal quadrics as a pluri-Lagrangian system

15:50–16:10

*Coffee Break*

16:10–16:40

**Frank Nijhoff:** Lagrangian multiforms and a quantum variational principle

16:40–17:10

**Maciej Nieszporski:** From Yang-Baxter maps and tetrahedron maps to discrete integrable systems

17:10–17:40

**Adam Doliwa:** KP maps and context-free languages

17:40–17:50

**Closing Remarks**

## List of posters

- Darlayne Addabbo:**  $Q$ -systems and generalizations in representation theory
- Kanae Akaiwa:** An approach to inverse eigenvalue problems from discrete integrable systems
- Victor César Costa Alves:** On a “quasi” integrable discrete Ibragimov-Shabat equation
- Guido Baardink:** Mathematical tools for designing periodic lattices with unusual softness and self-stress
- Bjorn Berntson:** Integrable delay-differential equations
- Mariusz Białecki:** Random domino automaton on Bethe lattice
- Xiangke Chang:** On peakon, Toda lattices and associated orthogonal polynomials
- Joseph Cho:** Discretization of  $\Omega$ -surfaces
- Akiko Fukuda:** Enumeration of fuzzy cellular automata with prescribed fixed point using Gröbner basis
- Ryad Ghanam:** Symmetries of the eikonal equation
- Sebastián Elías Graiff Zurita:** Fairing of discrete planar curves with integrable discretization of Euler’s elasticae
- Jing Guo:** An additive analogue of the Ore–Sato theorem on compatible rational functions
- Shin Isojima:** Ultradiscretization with parity variables for nonlinear oscillator and its preserved quantity
- Masaru Kamata:** Nonlinear  $O(3)$  sigma model in discrete complex analysis
- Shuhei Kamioka:** The discrete two-dimensional Toda equation gives nice formulae for reverse plane partitions
- Ryo Kamiya:** Two dimensional lattice equation as extension of Heideman-Hogan recurrence
- Thomas Kecker:** Non-standard discretisations of non-autonomous Hamiltonian systems of Painlevé type
- Katsuki Kobayashi:** Discrete integrable system associated with Laurent biorthogonal polynomials and its positive solutions
- Shi-Hao Li:** On B-Toda lattice
- Xin Li:** Long time asymptotics of Schur and related flows
- Kazuki Maeda:** Another generalization of the box–ball system with many kinds of balls
- Yukitaka Minesaki:** Totally conservative integration method for  $N$ -body problem and its equilibrium solutions
- Sanefumi Moriyama:** Integrability in super Chern–Simons matrix model
- Christian Müller:** Discretizations of surfaces with constant ratio of principal curvatures
- Akane Nakamura:** Two aspects of the theta divisors
- Yoichi Nakata:** Polytope approach for solving ultradiscrete ordinary difference equations
- Toshio Nakatsu:** Three-partition Hodge integrals
- Nobutaka Nakazono:** An elliptic Painlevé equation from next-nearest-neighbor translation on the  $E_8^{(1)}$  lattice
- Atsushi Nobe:** Algebraic entropy and chaos in cluster algebras
- Hyeongki Park:** Lotka-Volterra flow on discrete centroaffine plane curves
- Kanam Park:** A certain generalization of  $q$ -hypergeometric functions and their related monodromy preserving deformation
- H. Wajahat A. Riaz:** Multisoliton solutions of integrable discrete and semi-discrete principal chiral equations
- Yang Shi:** Certain subgroups of Coxeter groups and symmetry of discrete integrable equations
- Genki Shibukawa:** The multivariate Meixner polynomials
- Nobuhiko Shinzawa:** On the positiveness of the soliton solution for the discrete BKP equation
- Alexander Stokes:** Full-parameter discrete Painlevé systems from non-translational Cremona isometries
- Yuko Takae:** Kahan–Hirota–Kimura type discrete three wave system and QRT mapping
- Thamizharasi Tamizhmani:** On the canonical forms of QRT mappings and discrete Painlevé equations
- Dinh T. Tran:** Hierarchies of  $q$ -discrete second, third and fourth Painlevé equations and their properties

**Karol Trzeszczkowski:** Potential Korteweg-de Vries equations on honeycomb lattice  
**Mats Vermeeren:** Continuum limits of integrable lattice equations and their variational structure  
**Bao Wang:** Discrete invariant curve flows, orthogonal polynomials and moving frame  
**Ralph Willox:** Dynamical degrees and singularity patterns (2)  
**Masashi Yasumoto:** A geometric solution of the discrete sinh-Gordon equation and discrete space-like constant mean curvature surfaces in Minkowski space  
**Sikarin Yoo-Kong:** Discrete-time hyperbolic Calogero-Moser system  
**Cheng Zhang:** Darboux-Crum transformations and integrable lattice equations  
**Yingnan Zhang:** Integrable discretization of soliton equations based on Bäcklund transformation and its application in numerical simulations