

Box-Ball Systems from Integrable Systems and Probabilistic Perspectives

CRM Workshop, 19-23 September 2022

Centre de Recherches Mathématiques, Université de Montréal

**Organisers: David Croydon (Kyoto University), Makiko Sasada (University of Tokyo),
Satoshi Tsujimoto (Kyoto University)**

Monday 19th September	Tuesday 20th September	Wednesday 21st September	Thursday 22nd September	Friday 23rd September
10:00–10:50 Takahashi*	10:00–10:50 Tsujimoto	10:00–10:50 Tsujimoto	10:00–10:50 Kuniba*	10:00–10:50 Kuniba*
11:00–11:50 Ferrari*	11:00–11:50 Sasada	11:00–11:50 Ferrari*	11:00–11:50 Sasada	11:00–11:50 Croydon
13:30–14:20 Okado	13:30–14:20 O’Connell*	Free discussion	13:30–14:20 Willox	13:00–13:50 Doyon
14:30–15:20 Suda*	14:30–15:20 Quastel*		14:30–15:20 Lyu	14:00–14:50 Spohn*
15:40–16:30 Maeda	15:40–16:30 Sasamoto*		15:40–16:30 Wang	15:10–16:00 Pasquier
	16:40–17:30 Corwin		16:40–17:30 Franceschini	

Coffee/pastries 9:30–10:00 each morning. Coffee after second afternoon talk (not Wednesday). * = online participant.

Morning lectures

Daisuke Takahashi* *Viewpoints brought by the box and ball system*
 Pablo Ferrari* *Slot decomposition of the box-ball system*
 Satoshi Tsujimoto *Discrete integrable systems and their ultradiscretizations*
 Makiko Sasada *Bi-infinite dynamics and stationary measures for discrete KdV- and Toda-type systems*
 Atsuo Kuniba* *Integrability of box-ball systems and randomized box-ball systems*
 David Croydon *Generalized hydrodynamic limit for the box-ball system*

Afternoon talks

Masato Okado *Box-ball systems: reviews and recent developments*
 Hayate Suda* *Relationships between two linearizations of the box-ball system: rigged configuration and slot decomposition*
 Kazuki Maeda *Box-ball systems and biorthogonal polynomials*
 Neil O’Connell* *Toda and probability*
 Jeremy Quastel* *Polynuclear growth and the Toda lattice*
 Tomohiro Sasamoto* *BBS like behaviors in skew RSK dynamics*
 Ivan Corwin *Invariant measures for KPZ systems with boundaries*
 Ralph Willox *Direct and inverse scattering for the ultradiscrete KdV equation*
 Hanbaek Lyu *Scaling limit of soliton statistics of a multicolor box-ball system*
 Minmin Wang *Soliton speeds in the box-ball system*
 Chiara Franceschini *Some results for hard rods of inhomogeneous size*
 Benjamin Doyon *Generalised hydrodynamics for classical particle systems*
 Herbert Spohn* *Spacetime correlations of the classical Toda chain in thermal equilibrium*
 Vincent Pasquier *Hydrodynamics of the box-ball system*

<http://www.crm.umontreal.ca/2022/BBS22/index.e.php>