

## Lectures and Seminars

### Week 1

All lectures are in Old Geology Theatres 1,2 (Geology 1,2) [G19], Architecture-103 (Archi-103) [F18] or Physics Hercus Theatre (Hercus) [E20]. Morning tea and coffee will be served each day in the Tea Room from 9:30-10:00.

Tuesday 9 January	
11:00 Geology 1	Xin Liu: " <a href="#">Gauge potential decomposition and geometric description for topological defects</a> "
14:15 Geology 1	Philippe Ruelle: " <a href="#">The sandpile model: A lattice realization of a logarithmic CFT (1)</a> "
Wednesday 10 January	
11:00 Geology 1	Xi-Wen Guan: " <a href="#">Quantum phase transitions in the 1D imbalanced Fermi gas</a> "
14:15 Geology 1	Philippe Ruelle: " <a href="#">The sandpile model: A lattice realization of a logarithmic CFT (2)</a> "
15:15 Geology 1	Murray Batchelor: " <a href="#">Bethe ansatz (1)</a> "
Thursday 11 January	
10:00 Geology 1	Yao-Zhong Zhang: " <a href="#">Classical solutions of sigma models on supermanifolds</a> "
14:15 Geology 1	Philippe Ruelle: " <a href="#">The sandpile model: A lattice realization of a logarithmic CFT (3)</a> "
15:15 Geology 1	Murray Batchelor: " <a href="#">Bethe ansatz (2)</a> "
16:15 Tea Room	Reception
Friday 12 January	
10:00 Geology 1	Doochul Kim: " <a href="#">On spectral density of scale-free networks</a> "
11:00 Geology 1	Junji Suzuki: " <a href="#">The density matrix elements of spin-1/2 XXZ chain</a> "
14:15 Geology 1	Philippe Ruelle: " <a href="#">The sandpile model: A lattice realization of a logarithmic CFT (4)</a> "
15:15 Geology 1	Murray Batchelor: " <a href="#">Bethe ansatz (3)</a> "

### Week 2

All lectures are in Old Geology Theatres 1,2 (Geology 1,2) [G19], Architecture-103 (Archi-103) [F18] or Physics Hercus Theatre (Hercus) [E20]. Morning tea and coffee will be served each day in the Tea Room from 9:30-10:00.

Monday 15 January	
10:00 Geology 2	Jean-Marie Maillard: " <a href="#">Holonomy of the Ising model form factors</a> "
11:00 Geology 2	Zoltan Bajnok: " <a href="#">Equivalences between spin models induced by defects</a> "
14:15 Geology 2	Jon Links: " <a href="#">Quantum tunnelling of bosons (1)</a> "
15:15 Geology 2	Rafael Nepomechie: " <a href="#">Bethe ansatz (4)</a> "
Tuesday 16 January	
10:00 Geology 2	Gesualdo Delfino: " <a href="#">From particles to operators in integrable quantum field theories</a> "
14:15 Geology 2	Jon Links: " <a href="#">Quantum tunnelling of bosons (2)</a> "
15:15 Geology 2	Rafael Nepomechie: " <a href="#">Bethe ansatz (5)</a> "
Wednesday 17 January	
10:00 Geology 2	Rafael Nepomechie: " <a href="#">Exact solution of the open XXZ chain with general integrable boundary conditions at roots of unity</a> "
14:15 Archi-103	Jon Links: " <a href="#">Quantum tunnelling of bosons (3)</a> "
15:15 Archi-103	Rafael Nepomechie: " <a href="#">Bethe ansatz (6)</a> "
18:00 Michell Th	Public Lecture: Giuseppe Mussardo " <a href="#">Ludwig Boltzmann, the genius of disorder</a> "
Thursday 18 January	
10:00 Geology 2	Jean-Marie Maillard: " <a href="#">Fuchs versus Painleve: the anisotropic Ising model</a> "
11:00 Geology 2	Chongoh Lee: " <a href="#">Decay of an unstable D-brane</a> "
14:15 Archi-103	Zoltan Bajnok: " <a href="#">Bulk and boundary form factors in QFT (1)</a> "
15:15 Archi-103	Sergey Sergeev: " <a href="#">Multidimensional quantum integrable systems (1)</a> "
Friday 19 January	
10:00 Archi-103	Patrick Dorey: " <a href="#">Reality and integrability in (PT-symmetric) quantum mechanics</a> "
11:00 Archi-103	Yacine Ikhlef: " <a href="#">Antiferromagnetic Potts model on the square lattice: integrable structure and numerical results</a> "
14:15 Geology 1	Zoltan Bajnok: " <a href="#">Bulk and boundary form factors in QFT (2)</a> "
15:15 Geology 1	Sergey Sergeev: " <a href="#">Multidimensional quantum integrable systems (2)</a> "

### Week 3

All lectures are in Old Geology Theatres 1,2 (Geology 1,2) [G19], Architecture-103 (Archi-103) [F18] or Physics Hercus Theatre (Hercus) [E20]. Morning tea and coffee will be served each day in the Tea Room from 9:30-10:00.

Monday 22 January	
10:00 Archi-103	Barry McCoy: " <a href="#">The meaning of 'understanding' (1)</a> "
11:00 Archi-103	Changrim Ahn: " <a href="#">Super sine Gordon with Dirichlet boundary conditions</a> "
14:15 Geology 1	Zoltan Bajnok: " <a href="#">Bulk and boundary form factors in QFT (3)</a> "
15:15 Geology 1	Sergey Sergeev: " <a href="#">Multidimensional quantum integrable systems (3)</a> "
16:30 AMSI	Drinks and tour of AMSI
Tuesday 23 January	
10:00 Archi-103	Barry McCoy: " <a href="#">The meaning of 'understanding' (2)</a> "
11:00 Archi-103	Jorgen Rasmussen: " <a href="#">Solvable critical dense polymers</a> "
14:15 Geology 1	Denis Bernard: " <a href="#">SLE (1)</a> "
15:15 Geology 1	Chaiho Rim: " <a href="#">Sinh-Gordon boundary TBA and boundary Liouville reflection amplitude (1)</a> "
18:30 Jims Tavern	Workshop Dinner
Wednesday 24 January	
10:00 Archi-103	Vladimir Bazhanov: " <a href="#">Analytic theory of the eight-vertex model</a> "
11:00 Archi-103	Giuseppe Mussardo: " <a href="#">Neutral bound states in QFTs</a> "
14:15 Geology 1	Denis Bernard: " <a href="#">SLE (2)</a> "
15:15 Geology 1	Chaiho Rim: " <a href="#">Sinh-Gordon boundary TBA and boundary Liouville reflection amplitude (2)</a> "
Thursday 25 January	
10:00 Archi-103	Vladimir Bazhanov: " <a href="#">Dissipative quantum systems and CFT</a> "
11:00 Archi-103	Peter Forrester: " <a href="#">Aspects of matrix integrals</a> "
14:15 Geology 1	Denis Bernard: " <a href="#">SLE (3)</a> "
15:15 Geology 1	Chaiho Rim: " <a href="#">Sinh-Gordon boundary TBA and boundary Liouville reflection amplitude (3)</a> "
Friday 26 January (Australia Day Holiday)	

#### Week 4

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Monday 29 January	
10:00 Geology 2	Francesco Ravanini: <i>"Non-Linear Integral Equations and S-matrices"</i>
11:00 Geology 2	Nicholas Witte: <i>"Ising correlations and isomonodromy"</i>
14:15 Geology 1	Kolya Kitanine: <i>"Inverse scattering and the correlations of the XXZ model (1)"</i>
15:15 Geology 1	Tony Bracken: <i>"Phase-space-formulation of quantum mechanics (1)"</i>
Tuesday 30 January	
10:00 Geology 1	Chin-Kun Hu: <i>"Universality and scaling in critical systems"</i>
11:00 Geology 1	Zengo Tsuboi: <i>"Baxter Q-operators for <math>U_q(\hat{sl}(2 1))</math>"</i>
14:15 Geology 1	Kolya Kitanine: <i>"Inverse scattering and the correlations of the XXZ model (2)"</i>
15:15 Geology 1	Tony Bracken: <i>"Phase-space-formulation of quantum mechanics (2)"</i>
Wednesday 31 January	
10:00 Geology 1	Clare Dunning: <i>"Spectral equivalences from bosonic Hamiltonians"</i>
11:00 Geology 1	Patrick Jacob: <i>"TBA"</i>
14:15 Geology 1	Kolya Kitanine: <i>"Inverse scattering and the correlations of the XXZ model (3)"</i>
15:15 Geology 1	Tony Bracken: <i>"Phase-space-formulation of quantum mechanics (3)"</i>
Thursday 1 February	
10:00 Geology 1	Rodney Baxter: <i>"Exactly solvable models in statistical mechanics - an overview"</i>
11:00 Geology 1	Davide Fioravanti: <i>"Integrability in SYM theory"</i>
14:15 Geology 1	Jan de Gier: <i>"Diagram algebras, bilinear recurrences and alternating sign matrices (1)"</i>
15:15 Geology 1	Vladimir Rittenberg: <i>"Phase transitions in non-equilibrium systems (1)"</i>
Friday 2 February	
10:00 Geology 1	Vladimir Mangazeev: <i>"Analytic structure of Bethe Ansatz in the 8-vertex model"</i>
11:00 Geology 1	Siamak Khademi: <i>"Charge quantization in the phase space"</i>
14:15 Geology 1	Jan de Gier: <i>"Diagram algebras, bilinear recurrences and alternating sign matrices (2)"</i>
15:15 Geology 1	Vladimir Rittenberg: <i>"Phase transitions in non-equilibrium systems (2)"</i>

#### Week 5

All lectures are in Old Geology Theatres 1,2 (Geology 1,2) [G19], Architecture-103 (Archi-103) [F18] or Physics Hercus Theatre (Hercus) [E20]. Morning tea and coffee will be served each day in the Tea Room from 9:30-10:00.

Monday 5 February	
10:00 Geology 1	Speaker: <i>"Title"</i>
11:00 Geology 1	Tetsuji Miwa: <i>"Algebraic formulas for the correlation functions for the XXZ models (1)"</i>
14:15 Geology 1	Jan de Gier: <i>"Diagram algebras, bilinear recurrences and alternating sign matrices (3)"</i>
15:15 Geology 1	Vladimir Rittenberg: <i>"Phase transitions in non-equilibrium systems (3)"</i>
18:00 Michell Th	Public Lecture: Ed Corrigan <i>"Particles - a point of view"</i>
Tuesday 6 February	
10:00 Geology 1	Chin-Kun Hu: <i>"Finite-size corrections for critical lattice models"</i>
11:00 Geology 1	Katrina Hibberd: <i>"An exact solution for a model of Cooper pairs and condensed molecular bosons"</i>
14:15 Geology 1	Tetsuji Miwa: <i>"Algebraic formulas for the correlation functions for the XXZ models (2)"</i>
15:15 Geology 1	Speaker: <i>"Title"</i>
Wednesday 7 February	
10:00 Geology 1	Speaker: <i>"Title"</i>
11:00 Geology 1	Omar Foda: <i>"Domain wall boundary conditions, free fermions and plane partitions"</i>
14:15 Hercus	Tetsuji Miwa: <i>"Algebraic formulas for the correlation functions for the XXZ models (3)"</i>
15:15 Hercus	Norm Frankel: <i>"Spherical moments"</i>