

### Organized conferences

- Program “New trends in integrable models”, 15/08/2016–25/11/2016, International Institute of Physics (Natal, Brazil).
- Program “Statistical Mechanics, Integrability and Combinatorics”, 11/05–03/07/2015, and conference “Lattice Models: Exact Methods and Combinatorics”, 18–22/05/2015, Galileo Galilei Institute (Florence, Italy).
- Conference “Integrability and Combinatorics”, Giens, 23–27/06/2014.
- Member of scientific committee of FPSAC 2013, Paris.
- Conference “Random Matrices and Integrable Systems”, Les Houches, 5–9/03/2012.
- Conference “GranMa’11”, IHP Paris, 3–6/10/2011.
- Conference “GIMP’08”, Marseille, 15–19/09/2008.
- Conference “GIMP’06”, Moscou (Russia), 15–19/06/2006.
- Conference “Combinatorial methods in Physics and Knot Theory”, Moscow (Russia), 21–25/02/2005.

### Invited oral presentations in international conferences and schools

- Conference “Topological Matter, Strings,  $K$ -theory and related areas”, Adelaide (Australia), 26–30/09/2016: *Loop models and  $K$ -theory*.
- Conference “Boundary Degrees of Freedom and Thermodynamics of Integrable Models”, Natal (Brazil), 24/08/2016–02/09/2016: *Geometry and Quantum Integrable Systems, with an application to the Razumov–Stroganov correspondence*.
- Conference “Classical and Quantum Integrable Systems”, Saint-Petersburg (Russia), *Equivariant  $K$ -theory of the Grassmannian and quantum integrability*.
- Main speaker at the 76th “Séminaire Lotharingien de Combinatoire”, 03–06/04/2016: *Razumov–Stroganov Correspondences and the Geometry of Schubert Varieties*.
- Workshop “Six-vertex model, dimers, shapes, and all that”, Simons Center for Geometry and Physics (USA), 14–18/03/2016: *Symmetric polynomials, quantum integrability and Littlewood–Richardson rules*.
- Workshop “Random Matrix Theory”, OIST Okinawa (Japan), 02–06/11/2015: *Symmetric functions and quantum integrability*.
- Workshop “Moduli spaces, conformal field theory and matrix models”, University of Tokyo (Japan), 29–30/10/2015: *The geometry of loop models*.
- International workshop “Lie theory and its application in physics”, Varna (Bulgaria), 20/06/2015: *Generalized Littlewood–Richardson rules and quantum integrability*.
- 4th Workshop on Combinatorics of moduli spaces, Moscow (Russia), 26–31/05/2014: *The geometry of loop models*.
- Workshop “Integrability and isomonodromy in mathematical physics”, Lorentz Center (Leiden, Netherlands), 7–11/07/2014: *Quantum Knizhnik–Zamolodchikov equation: introduction and some applications*.
- Workshop “Knots and Physics”, University of Amsterdam (Netherlands), 20–21/05/2014: *Exactly solvable loop models and algebraic geometry: a review*.
- Workshop “Elliptic integrable systems and Hypergeometric functions”, Lorentz Center (Leiden, Netherlands), 15–19/07/2013: *Six- and Eight-vertex models on their combinatorial line*.
- Workshop on Combinatorial Physics, Cardiff University (UK), 17–19/12/2013: *The geometry of loop models*.
- Conference “Random tilings”, Simons Center for Geometry and Physics (USA), 18–22/02/2013: *Littlewood–Richardson coefficients and exactly solvable tilings*.
- Conference “The Beauty of Integrability: low-dimensional Physics, Statistical Models and Solitons”, International Institute of Physics, Natal (Brazil), 15–28/07/2012: *Exact ground states of spin chains from quantum Knizhnik–Zamolodchikov equation*.
- Conference “Conformal Invariance, Discrete Holomorphicity and Integrability”, University of Helsinki (Finland), 11/06–16/06/2012: *Exact ground states of spin chains from quantum Knizhnik–Zamolodchikov equation*.
- Conference “3rd Intl Workshop on Combinatorics of moduli spaces”, Moscow (Russia), 28/05–02/06/2012: *Alternating Sign Matrices and Descending Plane Partitions*.
- “Introductory Workshop: Lattice Models and Combinatorics”, MSRI (Berkeley, USA), 16–20/01/2012: *Six- and Eight-Vertex models on their combinatorial line*.
- Conference “Symmetries, Integrable Systems and Representations”, Lyon, 13–16/12/2011: *Six and Eight-vertex models on their combinatorial line*.

- “Annual Statistical Mechanics Meeting”, Melbourne, 1–2/12/2011: *From exactly solvable lattice models to Alternating Sign Matrices and Descending Plane Partitions*.
- Conference “Algèbres de Hecke Affines, le Programme de Langlands, Théorie des Champs Conformes et Théorie de Super Yang-Mills”, Luminy, 20/06–16/07/2011: *Six and eight-vertex models at their combinatorial point*.
- 4-th annual meeting of the European Non Commutative Geometry Network, 25–30/04/2011 (Simion Stoilow Institute, Bucharest): *Planar algebras and random lattice Potts model*.
- Workshop “Bialgebras in Free Probability”, 11–21/04/2011 (Erwin Schrödinger Institute, Vienna): *Planar algebras and Potts model on random lattices*.
- Workshop on Classical and Quantum Integrable Systems (CQIS-2011), 24–27/01/2011 (Protvino, Russia): *Alternating sign matrices and descending plane partitions*.
- Workshop “Physics and Mathematics of Random Matrix Theory”, 13–15/10/2010, Niels Bohr International Academy (Copenhagen, Denmark): *Planar algebras and Potts model on random lattices*.
- Workshop “Combinatorics and Mathematical Physics”, 12–14/07/2010, University of Queensland (Brisbane, Australia): *Combinatorics and loop models: open problems*.
- Workshop “Integrals over groups”, 7/06/2010, Université Cergy–Pontoise: *Integrals over groups in lattice gauge theory*.
- Conference “Random Matrices”, 1–4/06/2010, Université Paris 6: *The Potts model on random lattices revisited*.
- Workshop “Combinatorics of moduli spaces, cluster algebras and symplectic invariants”, 24–28/05/2010, Laboratoire Poncelet (Moscow, Russia): *Open problems in the combinatorics of loop models*.
- Conference “Free probability and the large  $N$  limit”, 1–5/02/2010, UCLA (USA): *Weingarten matrices and Jucys–Murphy elements*.
- Conference “Facets of integrability”, 5–7/11/2009, SPHT Saclay/ENS Paris: *Limiting shapes in the six-vertex model*.
- Workshop “Dimer models and random tilings – Two-dimensional lattice models”, 5–10/10/2009, IHP: *Exactly solvable models of tilings and Littlewood–Richardson coefficients*.
- Conference “Infinite Analysis 09: New Trends in Quantum Integrable Systems”, 27–31/07/2009, University of Kyoto (Japan):  *$O(1)$  loop model and combinatorics*.
- Conference “Conformal Field Theory, Integrable Models and Liouville gravity”, Landau Institute, Tchernogolovka (Russia), 27/06–2/07/2009: *Exactly solvable models of tilings and Littlewood–Richardson coefficients*.
- Journées Widom, Université Paris 7, 3–4/06/2009:  *$O(1)$  loop model and combinatorics*.
- Workshop of the London Mathematical Society Network on Classical and Quantum Integrability, Glasgow (Ecosse), 31/10–01/11/2008: *Exactly solvable models of tilings and Littlewood–Richardson coefficients*.
- Summer school “Exact Methods in Low-dimensional Statistical Physics and Quantum Computing”, Les Houches, 07/2008, course: *Integrability and combinatorics: selected topics*.
- Conference “Integrable Quantum Systems and Solvable Statistical Mechanics Models”, CRM Montreal (Canada), 30 juin–5/07/2008: *Integrable loop models and combinatorics*.
- Conference “Geometry and Integrability”, University of Melbourne (Australia), 6–15/02/2008, cours: *Geometry and Quantum Integrability*.
- Conference “Classical and Quantum Integrable Systems”, Protvino (Russia), 21–24/01/2008: *Loop models, Plane Partitions and Hirota equation*.
- Conference “Random and integrable models in mathematics and physics”, Bruxelles (Belgique), 11–15 Septembre 2007: *Integrable combinatorics: from loops to orbital varieties via plane partitions*.
- Conference “TQFT and Geometry”, Aarhus (Denmark), 18–22/06/2007: *Towards an algebro-geometric proof of the Razumov–Stroganov conjecture?*
- Workshop “Interactions between Algebraic Combinatorics and Algebraic Geometry”, CRM Montréal (Canada), 28/05–01/06/2007: *Brauer loop scheme and orbital varieties*.
- School and meeting ENRAGE, Barcelone (Espagne), 16–21/04/2007: course *Integrable loop models and combinatorics*.
- Conference “Free probability and the large- $N$  limit”, Berkeley (Etats-Unis), 26–30/03/2007: *Orthogonal Polynomials and Integrability in Matrix Models*.

- Conference “Combinatorics and Physics”, Max Planck Institute, Bonn (Allemagne), 19–23/03/2007: *Geometry and Combinatorics in Integrable Stochastic Processes*.
- Conference “Classical and Quantum Integrable Systems”, Dubna (Russia), 22–25/01/2007: *qKZ, ASMs, TSSCPPs and all that*.
- Conference “Affine Hecke algebras, the Langlands program, Conformal field theory and Matrix models”, Luminy, 19 juin–14/07/2006: *Brauer loop scheme and Orbital Varieties*.
- Conference FPSAC '06, San Diego (Etats-Unis), 19–23/06/2006: *From Orbital Varieties to Alternating Sign Matrices*.
- Conference “Asymptotic Problems in Analysis, Combinatorics and Mathematical Physics”, IHP Paris, 11–16/05/2006: *Matrix Models and Asymptotic Enumeration Problems*.
- Mini-conference “Transformation groups in Mathematical Physics”, Köln (Allemagne), 19–20/11/2005: *The Brauer loop scheme*.
- Summer school “Representation theory in Mathematical Physics”, Bad Honnef (Allemagne), 18–22/07/2005: *Nilpotent orbits and the Yang–Baxter equation*.
- CRM program “Random Matrices, Random Processes and Integrable Systems”, Montréal (Canada), 20/06–8/07/2005: *Nilpotent orbits and the Yang–Baxter equation*.
- Meeting Claude Itzykson, SPhT Saclay, 15–17/06/2005: *Combinatorics of the Brauer loop scheme*.
- Conference “Strings, Quantum Field Theory and Statistical mechanics”, UC Berkeley (USA), 9–13/05/2005: *Combinatorial properties of stochastic integrable processes*.
- Conference “Combinatorial methods in Physics and Knot Theory”, Moscow (Russia), 21–25/02/2005: *Combinatorics of the Brauer loop scheme*.
- Conference “Classical and Quantum Integrable Systems”, Dubna (Russia), 24–28/01/2005: *Combinatorial properties of stochastic integrable processes*.
- Conference “Perspectives in Random Matrix Theory”, Cuernavaca (Mexique),/08/2004: *Review of the HCIZ integral*.
- Conference of the European network Eurogrid, Les Houches, 22–26/03/2004: *Fully Packed Loop Models: integrability and combinatorics*.
- Conference “Geometry and Combinatorics in Physics”, Moscow (Russia), 2–7/03/2004: *Loop Models and Plane Partitions*.
- Conference “Numerical Methods, Calculations, and Simulations in Knot Theory and its Applications”, San Francisco (USA), 3/05/2003: *Some conjectures on the enumeration of alternating links and tangles*.
- Conference “Combinatorics and Integrable Models”, Canberra (Australia), 17/07/2002: *Matrix models and integrability: the HCIZ integral*.
- Conference “Systèmes aléatoires inhomogènes”, Cergy-Pontoise, 23/01/2002: *Enumerating knots and tangles via matrix models*.
- NATO advanced studies institute “Asymptotic combinatorics with application to mathematical physics”, Saint-Petersbourg,/07/2001.
- Meeting Claude Itzykson, SPhT Saclay, 20/06/2001: *Matrix models and Knot Theory*.
- Conference “Combinatorial aspects of Matrix Models”, ETH Zurich (Suisse), 15/05/2001: *Matrix models and knot counting*.
- Conference “Free Probability and Non-commutative Banach Spaces”, MSRI Berkeley (USA), 23/01/2001: *The enumeration of planar maps, links and knots*.
- Conference “Discrete Random Geometry” du réseau européen ESF “Discrete Random Geometry: from solid state physics to quantum gravity”, NBI Copenhague (Danemark), 29/09/2000: *Matrix models, knots and links*.
- Conference “Algèbre quantique et intégrabilité”, CRM Montreal (Canada), 25/04/2000: *The six-vertex model with domain wall boundary conditions*.

#### Other oral presentations

- Algebraic geometry seminar, Higher School of Economics (Moscow, Russia), 29/04/2017: *Schubert calculus and quantum integrability*.
- International Institute of Physics (Natal, Brazil), 08/09/2016: *Equivariant K-theory of the Grassmannian and quantum integrability*.

- Colloquium talk, Université Paris-Sud (Orsay), 18/10/2016: *Fonctions symétriques, intégrabilité quantique et géométrie*.
- Mathematical physics seminar, Columbia University, 26/10/2015: *From conormal bundles of Schubert varieties to loop models*.
- Galileo Galilei Institute (Florence, Italy), 25/05/2015: *From conormal bundles of Schubert varieties to loop models*.
- Colloquium talk, Melbourne University (Australia), 14/04/2015: *Symmetric functions and solvable lattice models*.
- Theoretical physics seminar, Australian National University, Canberra (Australia), 01/04/2015: *Symmetric functions and exact solvability: two examples*.
- Colloquium talk, Monash University (Australia), 03/04/2014: *Combinatorics and loop models: a review*.
- Algebra, Geometry, Topology seminar, University of Melbourne (Australia), 28/03/2014: *K-polynomials of orbital varieties and Yang–Baxter equation*.
- Colloquium talk, University of Queensland (Australia), 24/03/2014: *The geometry of loop models*.
- Philippe Flajolet combinatorics seminar, IHP (France), 06/02/2014: *From conormal bundles of Schubert varieties to the Brauer loop model*.
- Seminar of the Mathematics department, Indian Institute of Science, Bangalore, 10/09/2013: *Discrete holomorphicity and quantized affine algebras*.
- Tuesday seminar, Melbourne University, 20/08/2013: *The geometry of loop models*.
- Math. Phys. seminar, IPhT Saclay, 22/04/2013: *Discrete holomorphicity and quantized affine algebras*.
- Mathematical physics seminar, Columbia University, 25/02/2013: *Discrete holomorphicity and quantized affine algebras*.
- Chern–Simons research lectures, UC Berkeley (USA), 12/2012: *Schur functions and Littlewood–Richardson rule from exactly solvable tiling models*.
- Mathematical physics seminar, LPTHE, 10/12/2012: *Discrete holomorphicity and quantized affine algebras*.
- Combinatorics seminar, UC Davis, 15/02/2012: *Combinatorics and loop models: a review*.
- Colloquium, mathematics department, UCLA, 09/02/2012: *From exactly solvable stat mech models to Alternating Sign Matrices and Plane Partitions*.
- Combinatorics seminar, mathematics department, UC Berkeley, 30/01/2012: *Refined enumeration of Alternating Sign Matrices and Descending Plane Partitions*.
- Theoretical physics group seminar, Shanghai University, 5/12/2011: *Counting problems in 2D statistical mechanics*.
- Mathematical physics seminar, University of Melbourne, 29/11/2011: *Six and Eight-vertex models on their combinatorial line*.
- Mathematical physics seminar, University of Edinburgh, 9/03/2011: *Alternating Sign Matrices and Descending Plane Partitions*.
- Condensed matter seminar, Amsterdam University, 3/05/2010: *Limiting shapes in the six-vertex model*.
- Combinatorics seminar, mathematics department, UC San Diego, 10/02/2010: *Quantum integrability and combinatorics:  $qKZ$ ,  $ASM$ ,  $PP$* .
- Exceptional seminar, mathematics department, UC Berkeley, 5/01/2010: *The Brauer loop scheme and orbital varieties*.
- Theoretical physics department, University of Tokyo, 31/09/2009.
- IPMU seminar, Tokyo, 28/08/2009: *Exactly solvable models of tilings and Littlewood–Richardson coefficients*.
- Theoretical physics department seminar, Amsterdam University, 15/04/2009:  *$O(1)$  loop model and quantum  $KZ$  equation*.
- Mathematical physics seminar, Université d’Angers, 13/03/2009: *Modèles de pavages exactement solubles et coefficients de Littlewood–Richardson*.
- Algebra seminar, Université de Caen, 23/03/2007: *Des modèles de boucles intégrables aux variétés orbitales en passant par l’équation  $qKZ$* .
- Seminar “Algèbres enveloppantes”, Chevaleret, 17/11/2006: *From integrable loop models to orbital varieties via the  $qKZ$  equation*.

- Algebra seminar, Université Lyon 1, 5/10/2006: *Gométrie et Combinatoire dans les Processus Stochastiques Intégrables*.
- Statistical mechanics group seminar, Amsterdam University, 3/05/2006: *Loop models and Alternating Sign Matrices*.
- Seminar of the Fédération de Mécanique Statistique de Paris-Sud, 3/04/2006: *Loop models and Alternating Sign Matrices*.
- Seminar of LPTMS Orsay, 14/03/2006: *Combinatorial Properties of Integrable Stochastic Processes*.
- Mathematical physics seminar, LPT Orsay, 8/12/2005: *Integrable Stochastic Processes of Loops*.
- Geometry seminar, USC (USA), 18/05/2005: *The Brauer loop scheme*.
- Combinatorics seminar, Caltech (USA), 19/05/2005: *Towards a proof of the Razumov–Stroganov conjecture*.
- Seminar of Laboratoire Poncelet, Moscou (Russia), 21/03/2005: *Multidegrees of affine schemes and quantum integrability*.
- Algebraic geometry seminar of the Steklov Institute, Moscow (Russia), 17/03/2005: *Integrable model of crossings loops and multidegree of some affine schemes*.
- Theoretical physics group seminar, ITEP, Moscow (Russia), 2/12/2004: *Towards a proof of the Razumov–Stroganov conjecture*.
- Seminar “Representation theory and combinatorics”, Steklov Institute, Sankt Peterburg (Russia), 24/11/2004: *Towards a proof of the Razumov–Stroganov conjecture*.
- Seminar of LPTMS Orsay, 10/11/2004: *Vers une preuve de la conjecture Razumov–Stroganov*.
- Seminar *Knots and representation theory* of Moscow State University, 21/09/2004: *Matrix models and Virtual Knot Theory*.
- Theoretical Physics department seminar, High Energy Physics Institute of Protvino (Russia), 19/05/2004: *2D Models of Loops and Knots*.
- Seminar of the Theoretical Physics Department, Steklov Institute, Moscow (Russia), 12/05/2004: *Fully Packed Loop Models: Integrability and Combinatorics*.
- Seminar “Algorithmes”, INRIA, 26/01/2004: *Enumeration de noeuds et modèles de matrices*.
- “Biséminaire” of Institut Henri Poincaré, 4/11/2003: *Combinatoire de l’intégrale HCIZ*.
- Seminar of LIFR (Moscou, Russia), 8/10/2003: *Knots and Matrix Models*.
- Colloquium and mathematical physics seminar, UC Davis (USA), 12–13 mai 2003: *Matrix Models and Knot Theory and Virtual Links*.
- Mathematical physics seminar, UC Berkeley (USA), 6/05/2003: *Matrix Models and Knot Theory*.
- Mathematical physics seminar of Institut Fourier, université Joseph Fourier, Grenoble, 11/02/2003: *Théorie des noeuds et modèles de matrices: des entrelacs aux entrelacs virtuels*.
- Semester of Institut Henri Poincaré “Geometry and Statistics of Random Growth”, 22/01/2003: *Intégrales matricielles, combinatoire et intégrabilité*.
- Mathematical physics and geometry seminar, Chevaleret, 11/2000: *Modèles de matrices et énumérations de noeuds*.
- SPhT Saclay, 05/2000: *Enumerating colored tangles*.
- Institut Henri Poincaré, 9/11/1999: *Saddle points in large  $N$  matrix models*.
- LPTMS Orsay, 22/09/1999: *Quelques solutions exactes de modèles statistiques sur réseaux aléatoires*.