Organized conferences

- Conference "At the crossroads of physics and mathematics : the joy of integrable combinatorics A conference in the honor of Philippe Di Francesco's 60th birthday", 24–26/06/2024, Saclay (France).
- Conference "Integrability, Combinatorics and Representations", 2–6/09/2019, Giens (France).
- Workshop "Geometric *R*-matrices", 18–22/12/2017, MATRIX (Australia).
- 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

- Joint Meeting of the New Zealand, Australian and American Mathematical Societies, Auckland (New Zealand), 9–13/12/2024: The exceptional series and the YangBaxter equation.
- Conference "Yang-Baxter algebras", Herriot–Watt (UK), 3–7/06/2024: The exceptional series and the Yang-Baxter equation.
- Conference "Integrability and Algebraic Combinatorics", IPAM UCLA (USA), 15–19/04/2024: The Mac-Neille completion of the type B Bruhat poset.
- Conference "FPSAC", UC Davis (USA), 17–21/07/2023: Schubert puzzles as exactly solvable models (plenary talk).
- Conference "Integrable Systems and Symmetric Functions", Glasgow (virtual), 24–25/03/2023: Almost separated descent Schubert calculus.
- Symposium FoPM Tokyo (Japan), 06-08/02/2023: From exactly solvable models of statistical mechanics to combinatorics.
- Program "Randomness, Integrability and Universality", GGI Florence, 19/04–03/06/2022: Shuffle algebras and integrable lattice paths.
- Conference "IMPANGA 2020", Bedlewo (virtual), 12–16/07/2021: Generic pipe dreams and conormal matrix Schubert varieties.
- Conference "Lattice Paths, Combinatorics and Interactions", CIRM (virtual), 21–25/06/2021: Lattice paths and the commuting scheme.
- Program "Combinatorial Algebraic Geometry", ICERM Brown University (virtual), 01/02–07/03/2021 : Quantum integrability and Grassmannians and Puzzle rules in cotangent Schubert calculus.
- Conference "Hypergeometry Integrability and Lie Theory", Lorentz Center (virtual), 07–11/12/2020: Quantum Knizhnik–Zamolodchikov equation, pipe dreams and all that.
- Conference "New Connections in Integrable Systems", UQ Brisbane (virtual), 29/09–02/10/2020: Bosonic lattice models and honeycombs for Grothendieck polynomials.
- Conference "Frontiers in integrability Baxter 2020", ANU (Australia), 11–14/02/2020: The six-vertex model on random lattice revisited.
- Conference "Asymptotic Algebraic Combinatorics", UCLA (USA), 3–7/02/2020: Schubert calculus and quantum integrability.
- Conference "Integrable systems, special functions and combinatorics", Isle of Skye (Scotland), 23–28/06/2019: Schubert calculus and quantum integrability.
- Workshop "Discrete Geometry, Dynamics and Statistics", Bangkok (Thailand), 21–25/01/2019: Exactly solvable random tiling models.
- AustMS meeting, 3–7/12/2019: Schubert calculus and quantum integrable systems.
- Chern–Simons workshop "Recent Progress at the Intersection of Mathematics and Physics", Berkeley (USA), 8–9/11/2019: Schubert calculus and quantum integrable systems.

- International Congress of Mathematical Physics, Montreal (Canada), 23–28/07/2018: From quantum integrability to Schubert calculus.
- Conference "Quantum integrability and quantum Schubert calculus", Kavli Royal Society Centre (UK), 11–13/06/2018: Schubert puzzles and quantum integrability.
- Conference "6th Workshop on Combinatorics of Moduli Spaces, Cluster Algebras, and Topological Recursion", Moscow (Russia), 04–09/06/2018: Some numerology around Schubert calculus.
- Workshop "Combinatorics, Statistical Mechanics, and Conformal Field Theory", Creswick (Australia), 29/10–18/11/2017: Integrable tiling models.
- Conference "Algorithmic and Enumerative Combinatorics", ESI Vienna (Austria), 16–20/10/2017: 1324avoiding permutations.
- Conference "Integrability in low-dimensional quantum systems", Creswick (Australia), 26/06–21/07/2017: Schubert calculus and quantum integrability.
- 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), 11–15/06/2016: 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 integrabillity.
- 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: Sixand Eight-Vertex models on their combinatorial line.
- Conference "Symmetries, Integrable Systems and Representations", Lyon, 13–16/12/2011: Six and Eightvertex 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 co-efficients.
- 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, Glascow (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

- BIMSA (China), 24/05/2023: Almost separated descent Schubert calculus.
- Tsinghua University (China), 22/05/2023: The MacNeille completion of the type B Bruhat poset.
- Macaulay2 internals meeting (online), 23/10/2022: Update on Macaulay2Web.
- SMRI (University of Sydney, Australia), 09/06/2021: Generic pipe dreams and conormal matrix Schubert varieties.

- Colloquium of the mathematics department, University of Queensland (Brisbane, Australia), 10/02/2021: Schubert calculus and quantum integrability.
- Macaulay2 internals meeting (online), 26/09/2020: Presentation of Macaulay2Web.
- Colloquium of the mathematics department, Talca (Chile), 09/01/2020: Schubert calculus and quantum integrability.
- Joint colloquium of the RIMS and Mathematics Department of the University of Kyoto (Japan), 10/04/2019: Schubert calculus and quantum integrability.
- 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, integrabilité 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 departement 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: Gomtrie et Combinatoire dans les Processus Stochastiques Intgrables.
- 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 departement 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.