

Date Submitted: 2024-07-27 10:23:02

Confirmation Number: 1788371

Template: Full CV

Professor Christophe Hohlweg

Correspondence language: French

Sex: Male

Date of Birth: 1/18

Canadian Residency Status: Canadian Citizen

Country of Citizenship: Canada, France

Contact Information

The primary information is denoted by (*)

Address

Primary Affiliation (*)

Département de Mathématiques

Université du Québec à Montréal

CP 8888 - Succ. Centre Ville

Montréal Quebec H3C 3P8

Canada

Email

Work (*)

hohlweg.christophe@uqam.ca

Website

hohlweg.math.uqam.ca

Professor Christophe Hohlweg

Degrees

- 2006/8 - 2006/12 Habilitation, Habilitation à Diriger les Recherches, Algebraic Combinatorics, Université de Marne-La-Vallée
 Degree Status: Completed
 Supervisors: Jean-Yves Thibon
- 2000/10 - 2003/11 Doctorate, Doctorat en mathématiques, Mathematics, Université de Strasbourg 1- U Louis Pasteur
 Degree Status: Completed
 Supervisors: Christophe Reutenauer - Christian Kassel
- 1999/9 - 2000/9 Master's Equivalent, D.E.A. en mathématiques, Mathematics, Université de Strasbourg 1- U Louis Pasteur
 Degree Status: Completed
 Supervisors: Christophe Reutenauer
- 1998/9 - 1999/7 Master's Equivalent, Maitrise en mathématiques, Mathematics, Université de Strasbourg 1- U Louis Pasteur
 Degree Status: Completed
 Supervisors: Peter Littlemann

Recognitions

- 2024/11 Visiting professor at the Sydney Mathematical Research Institute (SMRI) - 7,000 University of Sydney
 Distinction
 I was invited by the SMRI to University of Sydney in my capacity as expert on geometric and algebraic combinatorics of Coxeter groups. The visiting professorship is attributed by the international Scientific Advisory Committee of SMRI.
- 2024/3 - 2024/4 INdAM (Istituto Nazionale di Alta Matematica) Professori visitatori
 Università Degli Studi (Bologna)
 Distinction
 I was invited to the University of Bologna in March/April 2024 to give a graduate class on geometric and algebraic combinatorics of Coxeter groups (open also to Faculty members). This national visiting professorship is awarded by INdAM (Istituto Nazionale di Alta Matematica).
- 2019/6 - 2027/5 Director - Québec
 Distinction
 Elected member of the Board of directors

2013/9 - 2013/10 Chercheur invité (senior)
 École Polytechnique (France)
 Distinction
 I was invited to spend 6 weeks at LIX (the computer science laboratory of l'École polytechnique) to give a series of lectures on my work on generalized associahedra. This recognition was a competition at Ecole polytechnique.

User Profile

Research Specialization Keywords: Mathematics, Coxeter and reflection groups, Algebraic combinatorics

Areas of Research: Algebra, Combinatorial, Geometry, Mathematics of Computing

Employment

2016/6 Professeur titulaire/Full professor
 Université du Québec à Montréal
 Full-time, Professor

2023/6 - 2023/12 Vice-doyen à la recherche (Vice-dean research) de la Faculté des sciences
 Faculté des sciences, Université du Québec à Montréal
 Part-time, Term
 Tenure Status: Non Tenure Track

2016/9 - 2023/5 Directeur du Laboratoire de Combinatoire et d'informatique Mathématique (LaCIM)
 LACIM, Université du Québec à Montréal
 Part-time, Term, Professor
 Tenure Status: Non Tenure Track

2011/6 - 2016/4 Professeur agrégé/Associate professor
 Université du Québec à Montréal
 Full-time, Associate Professor

2014/1 - 2014/6 Invited Researcher
 Mathématiques, Université de Strasbourg 1- U Louis Pasteur
 Full-time, Visiting Professorship
 Tenure Status: Non Tenure Track

2013/9 - 2013/10 Senior Invited Researcher
 Laboratoire d'informatique de l'X, École Polytechnique (France)
 Full-time, Visiting Professorship
 Tenure Status: Non Tenure Track

2007/6 - 2011/4 Professeur (assistant)
 Université du Québec à Montréal
 Full-time, Assistant Professor

2004/8 - 2007/6 Postdoctoral fellow
 The Fields Institute, The Fields Institute
 Full-time
 Tenure Status: Non Tenure Track

2005/4 - 2005/6 Invited Researcher
 Institut Mittag-Leffler, Institut Mittag-Leffler
 Full-time
 Tenure Status: Non Tenure Track

2003/9 - 2004/8 Attaché Temporaire d'Enseignement et de Recherche
 Mathématiques, Université de Strasbourg 1- U Louis Pasteur
 Full-time
 Tenure Status: Non Tenure Track

Research Funding History

Awarded [n=7]

2024/4 - 2029/3 Combinatorics of infinite Coxeter groups, Grant, Operating
 Principal Applicant

Funding Sources:

2024/4 - 2029/3 Natural Sciences and Engineering Research Council of Canada (NSERC)
 Subvention à la découverte - individuel
 Total Funding - 135,000 (Canadian dollar)
 Portion of Funding Received - 100 (Canadian dollar)
 Funding Renewable?: Yes
 Funding Competitive?: Yes

2022/7 - 2028/4 Centre de Recherche Mathématique (CRM); Regroupement stratégique FRQNT, Grant, Infrastructure
 Co-applicant

Funding Sources:

2015/4 - 2020/3 Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT)
 Regroupement stratégique
 Total Funding - 2,400,000 (Canadian dollar)
 Portion of Funding Received - 0
 Funding Competitive?: Yes

Funding by Year:

2022/7 - 2028/4 Total Funding - 500,000 (Canadian dollar)

Co-applicant : + all 13 CRM laboratory directors; + all 250 CRM members; Bélair, Jacques; Benjio, Yoshua; Deteix, Jean; Guichard, Frédéric; Harnad, John; Hoheisel, Tim; Jakobson, Dimitry; Khadra, Anmar; Lina, Jean-Marc;

Co-investigator : Addario-Berry, Dana; Apostolov, Vestislav; Darmon, Henri; Marceau, Etienne; Moodie, Erica; Vinet, Luc;

Principal Applicant : Cornea, Octav

2022/4 - 2027/4 Centre de Recherche Mathématiques (CRM), Grant
 Co-applicant

Funding Sources:

Natural Sciences and Engineering Research Council of Canada (NSERC)
 Discovery Institutes Support Grants (DIS)
 Total Funding - 5,768,740
 Portion of Funding Received - 0
 Funding Competitive?: Yes

Co-applicant : + all 250 CRM members;

Principal Applicant : Cornea, Octav

2022/4 - 2027/3 Combinatorial Representation Theory: Discovering the Interfaces of Algebra with Geometry and Topology, Grant
 Collaborator

Funding Sources:

Engineering and Physical Sciences Research Council (EPSRC)
(UK)
Total Funding - 4,312,000
Portion of Funding Received - 0
Funding Competitive?: Yes

Co-applicant : Faber, Eleonore; Marsh, Bethany; Martin, Paul; Martins, João Nuno
Gonçalves Faria; Parker, Alison;

Principal Applicant : Baur, Karin

2023/6 - 2026/6
Principal Applicant

LACIM Research infrastructure grant / Fonds institutionnel de recherche, Grant

Funding Sources:

Université du Québec à Montréal (UQAM)
Fonds institutionnel de recherche
Total Funding - 180,000
Portion of Funding Received - 0
Funding Competitive?: Yes

Co-applicant : + all 18 LACIM members;

Principal Applicant : Saliola, Franco

2020/1 - 2024/12
Co-applicant

CHARMS - Clusters, Homological Algebra, Representations and Mirror Symmetry, Grant

Funding Sources:

2019/6 - 2023/6 Agence nationale de la recherche (ANR) (France)
Total Funding - 260,027 (Euro)
Portion of Funding Received - 0
Funding Competitive?: Yes

Co-applicant : Amiot, Claire; Chapoton, Frédéric; Fock, Vladimir; Jacquet-Malo, Lucie;
Keller, Bernhard; Pilaud, Vincent; Plamondon, Pierre-Guy; Schroll, Sibylle; Stella,
Salvatore; Thomas, Hugh; Wagner, Emmanuel;

Principal Applicant : Palu, Yann

2018/4 - 2024/3
Principal Investigator

Algebraic and geometric combinatorics of Coxeter groups, Grant

Funding Sources:

2018/4 - 2023/3 Natural Sciences and Engineering Research Council of Canada
(NSERC)
Total Funding - 115,000 (Canadian dollar)
Portion of Funding Received - 100
Funding Competitive?: Yes

Completed [n=7]

2020/6 - 2023/6
Principal Applicant

LACIM Research infrastructure grant / Fonds institutionnel de recherche, Grant

Funding Sources:

Université du Québec à Montréal (UQAM)
Fonds institutionnel de recherche
Total Funding - 180,000
Portion of Funding Received - 0
Funding Competitive?: Yes

Co-applicant : + all LACIM researchers

- 2016/7 - 2022/7
Co-applicant
- Centre de Recherche Mathématique (CRM); Regroupement stratégique FRQNT;, Grant
- Funding Sources:**
- Fonds de recherche du Québec - Nature et technologies (FRQNT)
Total Funding - 1,200,000
Portion of Funding Received - 0
Funding Competitive?: Yes
- Co-applicant : + all 13 CRM laboratory directors; + all 250 CRM members;
Co-investigator : Bergeron, Anne; Boyer, Steven; Brassard, Gilles; Cook, Eric; Darmon, Henri; Fortin, André; Genest, Christian; Harnad, John; Jakobson, Dimitry; Lina, Jean-Marc; Oberman, Adam; Popovic, Léa; Renaud, Jean-François;
Principal Applicant : Vinet, Luc
- 2013/4 - 2018/3
Principal Investigator
- Coxeter groups and related structures, Grant, Operating
- Funding Sources:**
- 2013/4 - 2018/3 Natural Sciences and Engineering Research Council of Canada (NSERC)
Subvention à la découverte- individuel
Total Funding - 95,000 (Canadian dollar)
Portion of Funding Received - 95,000
Funding Competitive?: Yes
- 2017/1 - 2017/6
Co-applicant
- CRM Thematic Semester: Algebra and Words in Combinatorics, Grant
- Funding Sources:**
- Centre de recherches mathématiques (CRM)
Thematic Semester Program
Total Funding - 125,000
Portion of Funding Received - 0
Funding Competitive?: Yes
- Co-applicant : +12 others;
Principal Applicant : Brlek, Srečko; Saliola, Franco
- 2008/4 - 2013/5
Principal Investigator
- Combinatorics of Coxeter groups and relations with their associated structures, Grant, Operating
- Funding Sources:**
- 2008/5 - 2013/4 Natural Sciences and Engineering Research Council of Canada (NSERC)
Subvention à la découverte
Total Funding - 70,000 (Canadian dollar)
Portion of Funding Received - 70,000
Funding Competitive?: Yes
- Principal Investigator : Christophe Hohlweg
- 2010/4 - 2011/3
Co-investigator
- Laboratoire de mathématiques expérimentales, Grant, Equipment

Funding Sources:

2010/4 - 2011/3 Natural Sciences and Engineering Research Council of Canada (NSERC)
 Programme de subventions d'outils et d'instruments de recherche
 Total Funding - 34,728 (Canadian dollar)
 Portion of Funding Received - 11,000
 Funding Competitive?: Yes

Co-investigator : Christophe Reutenauer;

Principal Investigator : François Bergeron

2008/5 - 2010/4 Comprendre les associaèdres généralisés par la combinatoire des groupes de Coxeter,
 Principal Investigator Grant, Operating

Funding Sources:

2008/5 - 2010/4 Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT)
 Etablissement de nouveaux chercheurs
 Total Funding - 61,900 (Canadian dollar)
 Portion of Funding Received - 61,900
 Funding Competitive?: Yes

Principal Investigator : Christophe Hohlweg

Student/Postdoctoral Supervision

Bachelor's [n=7]

- 2017/5 - 2017/8 Antoine Abram, UQAM
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: Doctoral student, LACIM, UQAM

- 2016/5 - 2016/8 Florence Maas-Gariépy, UQAM
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: PhD in mathematics (2023), UQAM

- 2012/5 - 2012/8 Nadia Lafrenière, UQAM
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: Assistant prof (non-tenure trak), Concordia University

- 2009/5 - 2009/8 Marco Robado, UQAM
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: Master in mathematics (2015), UQAM

- 2009/5 - 2009/8 Maxime Scott, UQAM
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: Master in mathematics (2013), UQAM

- 2009/5 - 2009/8 Maxime Bergeron, McGill
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: PhD in mathematics (2016), University of British Columbia

- 2008/5 - 2008/8 Jonathan Lortie, UQAM
 Principal Supervisor Thesis/Project Title: Initiation to research summer scholarship
 Present Position: Professor CEGEP

Bachelor's Equivalent [n=1]

2017/4 - 2017/8 Balthazar Charles, École Normal Supérieure Cachan
Principal Supervisor Thesis/Project Title: Stage d'initiation à la recherche. Arrangement de Shi dans les groupes de Coxeter infinis
Present Position: Doctorat en mathématiques (2023), Paris-Saclay

Master's Thesis [n=9]

2019/9 - 2021/8 Florestan Brunck (Completed) , McGill University
Co-Supervisor Thesis/Project Title: Ordre faible dans les groupes de Coxeter
Present Position: PhD student, Institute of Science and Technology Austria

2015/1 - 2016/7 Sébastien Ouimet (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Automates reconnaissant le langage des mots réduits dans les groupes de Coxeter
Present Position: Professeur CEGEP

2012/9 - 2015/12 Alice Rémal (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Les polytopes de briques des groupes de Coxeter
Present Position: Teacher in France

2012/1 - 2013/12 Catherine Bourbeau (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Classes de conjugaison des éléments de Coxeter dans le cas infini
Present Position: Professor CEGEP

2009/9 - 2010/8 Chauvin Judite (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Les treillis cambriens
Present Position: Professeur CEGEP

2009/9 - 2010/8 Labbé Jean-Philippe (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Approche combinatoire des amas par les éléments triés des groupes de Coxeter
Present Position: Lecturer, Ecole de technologie supérieur (ETS)

2009/8 - 2010/8 Lejeune Laure (Completed) , UQAM
Principal Supervisor Thesis/Project Title: L'algèbre des descentes
Project Description: A voir
Present Position: High school teacher (CAPES France)

2009/8 - 2010/12 Lortie Jonathan (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Barycentre des associédres généralisés
Present Position: Professeur CEGEP

2007/9 - 2009/8 Vargas Yannic (Completed) , UQAM
Co-Supervisor Thesis/Project Title: Aspects algébriques des polynômes de Macdonald
Present Position: postdoctoral researcher, TU Graz

Doctorate [n=3]

2016/9 - 2020/8 Nathan Chapelier (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Variétés de Shi associées aux groupes de Weyl affines.
Present Position: Postdoctoral fellow, University of Sydney

2015/9 - 2019/8 Aram Dermenjian (Completed) , UQAM
Principal Supervisor Thesis/Project Title: Lattices in Coxeter groups (he held a FRQNT Doctoral research scholarships program for foreign students)
Present Position: was Heilbronn Fellow in Mathematics, University of Manchester

2007/1 - 2010/6
Co-Supervisor
Bergeron-Brelek Anouk (Completed) , York University
Thesis/Project Title: Words and noncommutative invariants of finite groups
Present Position: Lecturer, Ecole de technologie supérieur (ETS)

Doctorate Equivalent [n=2]

2023/6 - 2023/10
Principal Supervisor
Lorenzo Campioni, University of L'Aquila
Thesis/Project Title: Fellowship of four months at LACIM as part of his doctoral thesis.
Present Position: Doctoral student University of L'Aquila

2018/7 - 2018/12
Principal Supervisor
Krishanu Roy, The Institute of Mathematical Sciences
Thesis/Project Title: Six months fellowship at LACIM as part of his doctoral thesis.
Present Position: Assistant Professor, SRM University

Post-doctorate [n=5]

2021/8 - 2024/8
Principal Supervisor
José Bastidas Olaya (In Progress) , Université du Québec à Montréal (UQAM)
Present Position: Postdoctoral fellow, LACIM, UQAM

2016/9 - 2018/8
Co-Supervisor
Alexander Garver (Completed) , UQAM
Present Position: Credit Risk Analyst, Bluestem Brands

2014/7 - 2016/8
Principal Supervisor
Nathan Williams (Completed) , UQAM
Present Position: Assistant professor, University of Texas at Dallas

2010/8 - 2013/8
Principal Supervisor
Vivien Ripoll (Completed) , UQAM

2009/9 - 2011/8
Principal Supervisor
Stump Christian (Completed) , UQAM
Present Position: Professor, Ruhr-Universität Bochum

Staff Supervision

Event Administration

2023/6 - 2024/5
co-organizer, Bruhat order: recent developments and open problems, Workshop, 2024/4 - 2024/4

2022/12 - 2023/2
Member of Scientific committee, FPSAC2023, Conference, 2023/7 - 2023/7

2021/8 - 2022/7
Co-organizer, Second workshop on Algebraic Combinatorics of the Symmetric Groups and Coxeter Groups (Cetraro, Italy 2022), Conference, 2022/7 - 2022/7

2021/6 - 2021/10
Membre of Program Committee, 66e Congrès de l'Association Mathématique du Québec (AMQ), Conference, 2021/10 - 2021/10

2018/12 - 2021/8
Co-organizer, Les 30 ans du LACIM - cancelled due to COVID, Conference, 2021/9 - 2021/9

2018/12 - 2021/7
Co-organizer, Workshop on Algebraic Combinatorics of the Symmetric Groups and Coxeter Groups (Cetraro, Italy)., Conference, 2021/7 - 2021/7

2018/9 - 2019/5
Organizer, Algebraic and geometric methods in combinatorics - invited mini-symposium CANADAM 2019, Conference, 2019/5 - 2019/5

2015/5 - 2017/6
Organizer, Algebraic and geometric combinatorics of reflection groups, part of the Special semester «Algebra and words in combinatorics », Winter-Spring 2017 at the Centre de Recherche Mathématique (Montreal), Conference, 2017/5 - 2017/6

2016/6 - 2017/4	Organizer, 78e Séminaire Lotharingien de combinatoire & Thibon Fest, Conference, 2016/4 - 2016/4
2016/6 - 2017/1	Organizer, Combinatorial algebra meets algebraic combinatorics, Conference, 2017/1 - 2017/1
2014/9 - 2016/5	Organisateur, Séminaire hebdomadaire de Combinatoire du LaCIM, Seminar, 2014/9 - 2016/5
2015/1 - 2015/12	Organizer, Special session on Algebraic combinatorics at the Winter meeting of the Canadian Mathematical Society, Workshop, 2015/12 - 2015/12
2012/12 - 2013/6	Member of Scientific committee, FPSAC2013, Conference, 2013/6 - 2013/6
2012/3 - 2013/6	Member of Scientific committee, CANADAM 2013, Conference, 2013/6 - 2013/6
2011/9 - 2013/6	Organizer, Words, codes and algebraic combinatorics, a conference in honour of Christophe Reutenauer 60th birthday, Conference, 2013/6 - 2013/6
2012/1 - 2012/12	Organizer, Special session on Algebraic combinatorics at the Winter meeting of the Canadian Mathematical Society, Workshop, 2012/12 - 2012/12
2011/6 - 2012/8	Organizer, Coxeter groups meet convex geometry, Workshop, 2012/8 - 2012/8
2008/6 - 2008/12	Organizer, Special session on Algebraic combinatorics and Cluster algebras at the Winter meeting of the Canadian Mathematical Society, Workshop, 2008/12 - 2008/12
2005/9 - 2006/6	Member of Organizing committee, FPSAC2006, Conference, 2006/6 - 2006/6

Editorial Activities

2012/1 - 2013/6	Guest editor, International Journal of Algebra and Computations (IJAC), special issue in honour of Christophe Reutenauer's 60th birthday, Journal
-----------------	---

Organizational Review Activities

2021/6 - 2021/11	Expert externe, Université Laval I was one of the three external reviewers for the evaluation of the BA, MA and PhD programs in mathematics.
2017/5 - 2017/5	Expert externe, Université de Sherbrooke I was one of the two external reviewers for the evaluation of the BA, MA and PhD programs in mathematics.

Committee Memberships

2022/6 - 2023/12	Committee Member, Negotiation committee for the renewal of the Collective agreement SPUQ - UQAM, Université du Québec à Montréal
2018/9 - 2023/12	Committee Member, Commission des études (UQAM Academic senate) - elected position., Université du Québec à Montréal
2016/1 - 2019/2	Committee Member, Comité de sélection des Bourses de doctorat et postdoctorat en mathématiques, Fonds de recherche du Québec - Nature et technologies (FRQNT)
2018/6 - 2018/12	Committee Member, Negotiation committee for the renewal of the Collective agreement SPUQ - UQAM, Université du Québec à Montréal

2011/1 - 2012/3 Committee Member, Comité de sélection des bourses de maîtrise pour les mathématiques, Fonds de recherche du Québec - Nature et technologies (FRQNT)

Other Memberships

2008/6 Member, Canadian Mathematical Society

2008/4 Researcher, Centre de Recherche Mathématique (CRM)
Member of CRM through LACIM, one of its 13 laboratories

2019/11 - 2021/11 Member of the Board (Conseil d'administration), Association Mathématique du Québec

2011/7 - 2019/12 Researcher, LiA - LiRCO
LiRCO (Laboratoire International FrancoQuebecois de Recherche en Combinatoire). This was International Associated Laboratory (LIA) created in 2011 by the CNRS (France), with the LACIM as the Québec partner.

Presentations

1. (2024). Shi arrangements and low elements in Coxeter groups. ARTS - Algebra and Representation Theory Seminar, Università degli studi di Roma Tor Vergata, Roma, Italy
2. (2023). Shi arrangements and low elements. Seminario di Algebra e Geometrica, Università di Bologna, Bologna, Italy
3. (2023). Combinatoire des arrangements de Shi dans les groupes de Coxeter. Séminaire de combinatoire Flajolet, Paris, France
Invited?: Yes, Keynote?: Yes
4. (2023). Arrangements de Shi dans les groupes de Coxeter. Séminaire du LACIM, Montréal, Canada
5. (2023). Problems around inversions and descents sets in Coxeter groups. Brenti Fest, Bertinoro, Italy, Keynote?: Yes
6. (2022). Artin-Tits groups, Coxeter groups and Shi arrangements. Arizona State University mathematics colloquium, Phoenix, United States of America
7. (2021). Garside shadow and Shi arrangements in Coxeter groups. (for Montreal, via ZOOM) Algebraic Combinatorics of the Symmetric Groups and Coxeter Groups, Cetraro, Italie, Juillet 2021., Cetraro, Italy
8. (2020). Garside shadow and Shi arrangements in Coxeter groups. UCSD Combinatorics seminar, San Diego, United States of America
9. (2019). Combinatorics of reduced words in Coxeter groups and Shi arrangements. New York combinatorics seminar, Cuny Graduate Center, New York City, United States of America
10. (2018). On the word problem for Artin-Tits groups and Shi arrangements. Geometric group theory seminar (McGill University), Montreal, Canada
11. (2018). Small roots and Shi arrangements. Canadian Mathematical Society (CMS) summer meeting, scientific session on algebraic combinatorics, Fredericton, Canada
12. (2017). Artin-Tits Braid groups, Garside shadow and automata in Coxeter groups. Session 'Computations in groups and applications' in Mathematical Congress of Americas, Montreal, Canada
13. (2016). Ombre de Garside dans les groupes de Coxeter. Séminaire quantique (Université de Strasbourg), Strasbourg, France
14. (2016). Limit roots systems and imaginary cones in Coxeter groups. Geometric group seminar (McGill University), Montréal, Canada

15. (2016). Artin-Tits Braid groups, Garside shadow and Automata. Algebraic Combinatorics and Group Actions, Herstmonceux, United Kingdom
16. (2016). Artin-Tits Braid groups, Garside shadow and Automata. AMS Fall Sectional meeting, Bowdoin, United States of America
17. (2016). Artin-Tits Braid groups, Garside shadow and Automata. New York Applied Algebra Colloquium (CUNY Graduate Center), New York City, United States of America
18. (2015). Artin-Tits Braid groups, low elements and weak order in Coxeter groups. Algebraic combinatorics seminar at The Fields Institute, Toronto, Canada
19. (2015). Artin-Tits Braid groups, low elements and weak order in Coxeter groups. Algebra and Combinatorics seminar (NCSU), Raleigh, United States of America
20. (2015). Artin-Tits Braid groups, low elements and weak order in Coxeter groups. Algebra and Combinatorics seminar (Loyola University of Chicago), Chicago, United States of America
21. (2015). Artin-Tits Braid groups, low elements and weak order in Coxeter groups. Coxeter groups seminar (University of Notre-Dame), South-Bend, United States of America
22. (2014). Weak order and imaginary cone in infinite Coxeter groups. Algebraic combinatorics seminar at the Fields Institute, Toronto, Canada
23. (2014). Weak order and imaginary cone in infinite Coxeter groups. Discrete Geometry Seminar (Freie Universität), Berlin, Germany
24. (2014). Weak order and imaginary cone in infinite Coxeter groups. Séminaire d'algèbre (Université Claude Bernard), Lyon, France
25. (2014). Words and Roots in Infinite Coxeter groups. 72e Séminaire Lotharingien de Combinatoire, Lyon, France, Keynote?: Yes
26. (2014). Small roots, low elements and automaton in Coxeter groups. AMS Fall eastern sectional meeting, Halifax, Canada
27. (2014). Weak order and imaginary cone in infinite Coxeter groups. Algebra and Geometry Seminar (La Sapienza Università di Roma), Roma, Italy
28. (2013). Mot et Racines dans les groupes de Coxeter infinis. Minicourses at LIX, École Polytechnique, Palaiseau, France, Keynote?: Yes
29. (2013). Mot et racines dans les groupes de Coxeter infinis. Séminaire Quantique (Université de Strasbourg), Strasbourg, France
30. (2012). Points limites des systèmes de racines des groupes de Coxeter infinis. Séminaire quantique (Université de Strasbourg), Strasbourg, France
31. (2012). Asymptotical behaviour if roots in infinite Coxeter groups. Combinatorial algebra meets Algebraic combinatorics, 9th annual meeting, Montréal, Canada, Keynote?: Yes
32. (2009). Words and polynomials invariants of finite groups in non-commutative variables. 65th Algebra Day, University of Ottawa-Careton, Ottawa, Canada, Keynote?: Yes
33. (2008). Permutahedra and generalized associahedra. MIT combinatorics seminar, Boston, United States of America
34. (2008). Descent algebras and characters of finite Coxeter groups. New York Algebra Colloquium (CUNY Graduate Center), New-York City, United States of America
Invited?: Yes, Keynote?: Yes
35. (2007). Descent algebras of finite Coxeter groups. Shuffles, descents and representations, a conference in memory of Manfred Schocker, Nice, France

36. (2006). Realizations of the associahedron and cyclohedron. The UC Berkeley combinatorics seminar, Berkeley, United States of America
Invited?: Yes
37. (2006). Realizations of the associahedron and cyclohedron. UCSD Combinatorics seminar, San Diego, United States of America
38. (2006). Realizations of the associahedron and cyclohedron. Séminaire d'algèbre et de topologie, Université de Strasbourg, Strasbourg, France
39. (2006). Realizations of the associahedron and cyclohedron. Dartmouth College Combinatorics seminar, Hanover, United States of America
40. (2005). Coloring descents and peaks. MIT combinatorics seminar, Boston, United States of America
41. (2005). Descent algebras of finite Coxeter groups. Mittag-Leffler Institute seminar, Stockholm, Sweden
42. (2005). Realizations of the associahedron and cyclohedron. Combinatorics Seminar (University of Michigan), Ann Arbor, United States of America
43. (2004). Algèbre des descentes généralisées et caractères irréductibles en type B. Séminaire Claude Chevalley, Paris, France

Broadcast Interviews

2011/01/30 - Le nombre d'or, Découverte, Radio-Canada
2011/01/30

Publications

Journal Articles

1. Dyer, M; Fishel, S; Hohlweg, C; Mark, A. (2024). Shi arrangements and low elements in Coxeter groups. *Proceed. of the LMS*.
Accepted,
2. Bastidas, J*; Hohlweg, C; Saliola, F. (2023). The Primitive Eulerian polynomial. *Combinatorial theory*.
Accepted,
3. Chapelier-Laget, N*; Hohlweg, C. (2023). Shi arrangements and low elements in affine Coxeter groups. *Journal of the Canadian Mathematical Society*.
Accepted,
4. Dermenjian, A*; Hohlweg, C ; McConville, T; Pilaud, V. (2022). The facial weak order on hyperplane arrangements. *Discrete & Computational Geometry*. 67: 166--202. ,
5. Hohlweg, C.; Préaux, J.-P.; Ripoll, V. (2019). On the limit sets of root systems of Coxeter groups and Kleinian groups. *Communication in algebra*. 48(3): 1281-1304. ,
6. Baumann, P.; Chapoton, F.; Hohlweg, C.; Thomas, H. (2018). Chains in shard lattices and BHZ posets. *Journal of Combinatorics*. 301: 739-784. ,
7. Hohlweg, C; Pilaud, V; Stella, S. (2018). Polytopal realizations of finite type g -vector fans. *Advances in Mathematics*. 328: 713--749. ,
8. Dermenjian, A*; Hohlweg, C; Pilaud, V. (2018). The facial weak order of finite Coxeter groups and its lattice quotients. *Transactions of the American Mathematical Society*. 370(2): 1469--1507. ,

9. Dyer, Matthew and Hohlweg, Christophe and Ripoll, Vivien. (2016). Imaginary cones and limit roots of infinite Coxeter groups. *Mathematische Zeitschrift*. 284: 715--780. ,
Refereed?: Yes
10. Hohlweg, Christophe and Nadeau, Philippe and Williams, Nathan. (2016). Automata, reduced words and Garside shadows in Coxeter groups. *Journal of Algebra*. 457: 431--456. ,
11. Dyer, Matthew and Hohlweg, Christophe. (2016). Small roots, low elements, and the weak order in Coxeter groups. *Advances in Mathematics*. 301: 739--784. ,
12. Hohlweg, Christophe and Lobb{\e}, Jean-Philippe. (2016). On inversion sets and the weak order in Coxeter groups. *European Journal of Combinatorics*. 55: 1--19. ,
13. Dehornoy, Patrick and Dyer, Matthew and Hohlweg, Christophe. (2015). Garside families in Artin--Tits monoids and low elements in Coxeter groups. *Comptes Rendus Mathematique*. 353(5): 403--408. ,
14. Hohlweg, Christophe and Lobb{\e}, Jean-Philippe and Ripoll, Vivien. (2014). Asymptotical behaviour of roots of infinite Coxeter groups. *Canadian Journal of Mathematics*. 66(2): 323--353. ,
15. Bergeron-Brlek, Anouk and Hohlweg, Christophe and Zabrocki, Mike. (2012). Words and Polynomial Invariants of Finite Groups in Non-Commutative Variables. *Annals of Combinatorics*. 16: 1--36. ,
16. Hohlweg, Christophe and Lange, Carsten EMC and Thomas, Hugh. (2011). Permutahedra and generalized associahedra. *Advances in Mathematics*. 226(1): 608--640. ,
17. Hohlweg, C.; Lortie, J.; Raymond, A. (2010). The center of gravity of the associahedron and if the permutahedron are the same. *Electronic Journal of Combinatorics*. 17(1): R72. ,
18. Bergeron, N.; Hohlweg, C.; Lange, C.; Thomas, H. (2009). Isometry classes of generalized associahedra. *Séminaire Lotharingien de combinatoire*. B61a,
19. Baumann, Pierre and Hohlweg, Christophe. (2008). A Solomon descent theory for the wreath products GS_n . *Trans. Amer. Math. Soc.* 360(3): 1475--1538. ,
20. Bonnafé, C.; Hohlweg, C. (2008). Generalized descent algebra and construction of irreducible characters of hyperoctahedral groups. *Annales de l'Institut Fourier*. 56: 131-181. ,
21. Hohlweg, Christophe. (2007). Generalized descent algebras. *Canadian mathematical bulletin*. 50(4): 535--546. ,
22. Hohlweg, Christophe and Lange, Carsten EMC. (2007). Realizations of the associahedron and cyclohedron. *Discrete & Computational Geometry*. 37: 517--543. ,
23. Bergeron, N.; Hohlweg, C.; Rosas, M.; Zabrocki, M. (2006). Grothendieck bialgebras, Partition lattices and symmetric functions in noncommutative variables. *Electronic journal of combinatorics*. 13(1),
24. Bergeron, Nantel and Hohlweg, Christophe and Zabrocki, Mike. (2006). Posets related to the connectivity set of Coxeter groups. *Journal of Algebra*. 303(2): 831--846. ,
25. Bergeron, Nantel and Hohlweg, Christophe. (2006). Coloured peak algebras and Hopf algebras. *Journal of Algebraic Combinatorics*. 24(3): 299--330. ,
26. Hohlweg, Christophe. (2005). Minimal and maximal elements in two-sided cells of S_n and Robinson--Schensted correspondence. *Discrete mathematics*. 304(1): 79--87. ,
27. Blessenohl, Dieter and Hohlweg, Christophe and Schocker, Manfred. (2005). A symmetry of the descent algebra of a finite Coxeter group. *Advances in Mathematics*. 193(2): 416--437. ,
28. Hohlweg, Christophe. (2005). A generalization of plactic--coplactic equivalences and Kazhdan--Lusztig cells. *Journal of Algebra*. 283(2): 671--689. ,
29. Hohlweg, Christophe and Schocker, Manfred. (2004). On a parabolic symmetry of finite Coxeter groups. *Bulletin of the London Mathematical Society*. 36(3): 289--293. ,

30. Hohlweg, C.; Reutenauer, C. (2003). Lyndon words, permutations and trees. *Theoretical Computer Science*. 307(1): 173-178. ,
31. Hohlweg, Christophe and Reutenauer, Christophe. (2001). Inverses of words and the parabolic structure of the symmetric group. *European Journal of Combinatorics*. 22(8): 1075--1082. ,

Book Chapters

1. Christophe Hohlweg. (2012). Permutahedra and Associahedra: Generalized associahedra from the Geometry of finite reflection groups. F. Mueller-Hoissen, J. Pallo, J. Stasheff. *Associahedra, Tamari Lattices and Related Structures, Tamari Memorial Festschrift*. *Progress in Mathematics*(299): 129-159. Published, Birkhauser, Refereed?: Yes

Conference Publications

1. Matthew Dyer, Susanna Fishel, Christophe Hohlweg, Alice Mark. (2024). Shi arrangements and low elements in Coxeter groups. *FPSAC - Formal Power Series and Algebraic Combinatorics*, Bochum, Germany, Conference Date: 2024/7
2. Dermenjian A., .Hohlweg C., McConville T. Pilaud V. (2020). The facial weak order on hyperplanes arrangements. *FPSAC - Formal Power Series and Algebraic Combinatorics*, Online (COVID), Israel, Conference Date: 2020/7
3. Hohlweg, C., Pilaud, V., Stella, S. (2018). Universal associahedra. *Séminaire Lotharingien de Combinatoire*. *FPSAC - Formal Power Series and Algebraic Combinatorics*, Dartmouth College, United States of America, Conference Date: 2018/7
4. Aram Dermenjian*, Christophe Hohlweg, Vincent Pilaud. (2016). The facial weak order in finite Coxeter groups. *FPSAC 2016*, Vancouver, Canada, Conference Date: 2016/7
5. Christophe Hohlweg, Jean-Philippe Labbé*, Vivien Ripoll*. (2012). Asymptotical behaviour of roots of infinite Coxeter groups I. *FPSAC 2012*, Nagoya, Japan, Conference Date: 2012/8