

Canadian
of Mathematics

Journal

canadien de
mathématiques

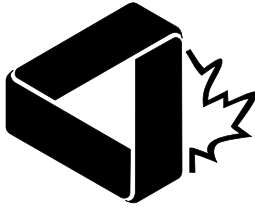
2025 77/1
February / février



Canadian Mathematical Society
Société mathématique du Canada



CAMBRIDGE
UNIVERSITY PRESS



CANADIAN JOURNAL OF MATHEMATICS

JOURNAL CANADIEN DE MATHÉMATIQUES

EDITORS-IN-CHIEF / RÉDACTEURS-EN-CHEF

Henry Kim & Robert McCann

University of Toronto, Canada

cjm-editors@cms.math.ca / jcm-redacteurs@smc.math.ca

ASSOCIATE EDITORS / RÉDACTEURS ASSOCIÉS

Amir Akbary
University of Lethbridge

Kathrin Bringmann
University of Cologne

Guillaume Chapuy
Université Paris Diderot

Benoit Collins
Kyoto University

Dmitry Jakobson
McGill University

Ailana Fraser
University of British Columbia

Alex Iosevich
University of Rochester

Krzysztof Kapulkin
University of Western Ontario

Rahim Moosa
University of Waterloo

Dmitry Panchenko
University of Toronto

Marek Ptak
University of Agriculture in Krakow

Hadi Salmasian
Université d'Ottawa

Valentino Tosatti
McGill University

Deping Ye
Memorial University of Newfoundland

Fabrizio Andreatta
Università Studi di Milano

Lia Bronsard
McMaster University

Jingyi Chen
University of British Columbia

Octav Cornea
Université de Montréal

Shaun Fallat
University of Regina

Philippe Gille
CNRS & University Claude Bernard

Michael Jury
University of Florida

Matilde Lalin
Université de Montréal

Monica Nevins
Université d'Ottawa

Julia Plavnik
Indiana University - Bloomington

Frédéric Rochon
Université du Québec à Montréal

Alistair Savage
Université d'Ottawa

Shawn XianFu Wang
University of British Columbia

Yingfei Yi
University of Alberta

Hans Boden
McMaster University

Lucy Campbell
Carleton University

Adam Clay
University of Manitoba

Michelle Delcourt
Toronto Metropolitan University

Ilijas Farah
York University

Slim Ibrahim
University of Victoria

Joel Kamnitzer
McGill University

Monika Ludwig
TU Wien

Robert Osburn
University College Dublin

Malabika Pramanik
University of British Columbia

William Ross
University of Richmond

Terry Soo
University College London

Liam Watson
University of British Columbia

© Canadian Mathematical Society / Société mathématique du Canada, 2025

All rights reserved / tous droits réservés

Suite 209, 1725 St. Laurent Blvd., Ottawa, ON K1G 3V4

ISSN 0008-414X (Print / imprimé), 1496-4279 (Online / électronique)

Printed by Sheridan, a CJK Group Company.

The geometric figure on the cover, a four-dimensional polytope, was redrawn by Javad Mashreghi from the inside cover page of the celebrated book 'Regular Polytopes' by Harold Scott MacDonald Coxeter (1907–2003), one of the greatest geometers of the 20th century. Coxeter, a Fellow of the Royal Society of Canada and a Fellow of the Royal Society (London), joined the University of Toronto in 1936 and worked there enthusiastically for 60 years. Since 1978, the Canadian Mathematical Society has awarded the Coxeter-James Prize in his honor.

La figure géométrique sur la couverture, un polytope en dimension quatre, a été reprise par Javad Mashreghi du plat intérieur du célèbre ouvrage Regular Polytopes de Harold Scott MacDonald Coxeter (1907–2003), l'un des plus grands géomètres du XXe siècle. Membre de la Société royale du Canada et de la Royal Society (Londres), H.M.S. Coxeter s'est joint au corps professoral de l'Université de Toronto en 1936, où il a travaillé avec enthousiasme pendant 60 ans. Depuis 1978, la Société mathématique du Canada décerne le prix Coxeter-James en son honneur.

-
- | | | |
|-----|--|--|
| 1 | Anisotropic flow, entropy, and L^p -Minkowski problem | <i>Károly J. Böröczky and Pengfei Guan</i> |
| 21 | Combinatorial proofs of properties of double-point enhanced grid homology | <i>Ollie Thakar</i> |
| 57 | Equivariant C^* -correspondences and compact quantum group actions on Pimsner algebras | <i>Suvrajit Bhattacharjee and Soumalya Joardar</i> |
| 97 | Unified bounds for the independence number of graphs | <i>Jiang Zhou</i> |
| 118 | Solvability of Hessian quotient equations in exterior domains | <i>Limei Dai, Jiguang Bao, and Bo Wang</i> |
| 149 | Extension of monotone operators and Lipschitz maps invariant for a group of isometries | <i>Giulia Cavagnari, Giuseppe Savaré, and Giacomo Enrico Sodini</i> |
| 187 | Linear maps preserving (p, k) -norms of tensor products of matrices | <i>Zejun Huang, Nung-Sing Sze, and Run Zheng</i> |
| 208 | Multi-linear forms, graphs, and L^p -improving measures in \mathbb{F}_q^d | <i>Pablo Bhowmik, Alex Iosevich, Doowon Koh, and Thang Pham</i> |
| 252 | Affine isoperimetric inequalities on flag manifolds | <i>Susanna Dann, Grigoris Paouris, and Peter Pivovarov</i> |
| 282 | Meridional rank and bridge number of knotted 2-spheres | <i>Jason Joseph and Puttipong Pongtanapaisan</i> |
| 300 | Higher dimensional algebraic fiberings for pro- p groups | <i>Dessislava H. Kochloukova</i> |
| 324 | Symmetric and antisymmetric tensor products for the function-theoretic operator theorist | <i>Stephan Ramon Garcia, Ryan O'Loughlin, and Jiahui Yu</i> |
| 347 | Addenda to “Correspondence theorems for Hopf algebroids with applications to affine groupoids” | <i>Laiachi El Kaoutit, Aryan Ghobadi, Paolo Saracco, and Joost Verduynse</i> |