

COURTNEY GEORGE

University of California, Riverside
Department of Mathematics

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Employment

2023 - present University of California at Riverside, Visiting Assistant Professor

Education

University of Kentucky Ph.D. in Mathematics, Fall 2023, advised by Dr. Christopher Manon
University of Kentucky M.A. in Mathematics, Fall 2019
Western Kentucky University B.A. in Mathematics, Spring 2018

Publications

Research Interests: Algebraic Geometry, Tropical Geometry, Toric Vector Bundles

- "Positivity Properties of Divisors on Toric Vector Bundles," with Christopher Manon. Preprint. Available at [arXiv:2308.09014](https://arxiv.org/abs/2308.09014)
- "Algebra and Geometry of Irreducible bundles of rank n on \mathbb{P}^n ," with Christopher Manon. Preprint. Available at [arXiv:2308.09017](https://arxiv.org/abs/2308.09017)
- "Cox Rings of Projectivized Toric Vector Bundles and Toric Flag Bundles," with Christopher Manon. Available at [arXiv:2205.10147](https://arxiv.org/abs/2205.10147). Accepted at *The Journal for Pure and Applied Algebra*.
- "Spectral properties of graphs associated to the Basilica group," with Antoni Brzoska, Samantha Jarvis, Luke G. Rogers, and Alexander Teplyaev. Available at [arXiv:1908.10505](https://arxiv.org/abs/1908.10505)
- "Counting odd numbers in truncations of Pascal's triangle," with Robert G. Donnelly, Molly W. Dunkum, and Stefan Schnake. Available at [arXiv:1807.08181](https://arxiv.org/abs/1807.08181)

Teaching Interests: Alternative grading practices

- "Implementing student-centered assessment: motivations, experiences, supports, and challenges," with Justin Barhite, Benjamin Braun, Angela Hanson, Hunter Lehmann, and Chloe Urbanski Wawrzyniak. *PRIMUS*, DOI: 10.1080/10511970.2023.2265358 .

Presentations

2024 Jan Joint Mathematics Meeting (JMM): Combinatorial Insights into Algebraic Geometry
2023 Nov University of California Riverside: Algebraic Geometry Seminar
2023 Jul SIAM Conference on Applied Algebraic Geometry (AG23)
2023 Jul *Géométrie Algébrique en Liberté* (GAeL) XXX
2023 May University of Kentucky: Algebra Seminar
2023 Mar University of Minnesota: Commutative Algebra and Algebraic Geometry (CAAG) Seminar
2022 Nov Ohio State University: Algebraic Geometry Seminar
2022 Oct AMS Eastern Sectional Meeting, University of Massachusetts, Amherst
2022 Oct University of Kentucky: Algebra Seminar
2022 Apr Western Kentucky University: Graduate Seminar
2022 Feb Western Kentucky University: Annual Mathematics Symposium
2020 Nov University of Kentucky: Algebra Seminar
2020 Oct University of Kentucky: Graduate Student Colloquium
2019 Sept University of Kentucky: Algebra Seminar

Teaching Experience

Following the convention at each institution, courses beginning with "MA" were taught at the University of Kentucky and courses with "MATH" were taught at the University of California, Riverside.

- Primary Instructor:
 - MATH 171: *Introduction to Modern Algebra*, Winter 2023
 - MATH 165A: *Introduction to Complex Variables*, Winter 2023
 - MATH 005A: *Principles of Calculus I*, Fall 2023
 - MA 123: *Elementary Calculus and its Applications*, Summer 2023
 - MA 109: *Co-requisite to College Algebra*, Fall 2022
 - MA 322: *Matrix Algebra and its Applications*, Spring 2022
 - MA 202: *Mathematical Problem Solving for Elementary Teachers*, Spring 2021
 - A&S 122: *Co-requisite to College Algebra*, Fall 2020
 - MA 109: *College Algebra*, Co-instructor, Fall 2020
 - MA 109: *College Algebra*, Spring 2020
- Recitation Leader:
 - MA 213: *Multivariable Calculus*, Fall 2021
 - MA 123: *Elementary Calculus and its Applications*, Fall 2019
 - MA 110: *Algebra & Trig for Calculus*, Fall 2018, Spring 2019
- Grader:
 - MA 214: *Differential Equations*, Spring 2023

Service and Outreach

Spectra Survey of Mathematics Conference (SSMC) 2023 Co-Organizer	Spring 2023
MathLab Undergraduate Research Program, Assistant Project Coordinator	2021 - 2023
UK Mathematics Department Diversity, Equity, and Inclusion (DEI) Council	2021 - 2022
Mathematics Graduate Student Council, Qualified Co-chair	2021 - 2022
Spectra at University of Kentucky, Founding Member and Secretary	2021 - 2022
Mathematics Graduate Student Council, Treasurer	2020 - 2021
Working Group on Ethics, Equity, Diversity, and Justice in the Mathematical Sciences	2020 - 2023
Algebra Preliminary Exam Workshop Leader	Winter 2020
AWM Annual First and Second Year Graduate Panelist	October 2020
University of Kentucky FastTrack Teaching Assistant	August 2020
Appalachia Initiative Graduate School Panelist	October 2019
Mathematics Graduate Student Council, Pre-Qualified Co-chair	2019 - 2020

Awards and Honors

College of Arts & Sciences Outstanding Teaching Award	Spring 2022
University of Kentucky Woman's Club Fellowship	Spring 2022
Max Steckler Fellowship	August 2018 - May 2021
Graduate Scholars in Mathematics	August 2018 - August 2020