Lauren Cranton Heller

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PROFESSIONAL EXPERIENCE

CURRENT	**University of Nebraska, Lincoln** *Postdoctoral Faculty*
2024	**Mathematical Sciences Research Institute** *Huneke Endowed Postdoctoral Fellow*
2023	**University of Nebraska, Lincoln** *Postdoctoral Faculty*

EDUCATION AND TRAINING

2023	**University of California, Berkeley** *PhD in mathematics* advisor: David Eisenbud
2017	**Wellesley College** *mathematics major, chemistry minor*

RESEARCH INTERESTS

commutative algebra with geometric applications
multigraded regularity, linear resolutions, coordinate rings, toric varieties

PAPERS

[1] Juliette Bruce, Lauren Cranton Heller, and Mahrud Sayrafi, *Bounds on Multigraded Regularity*, arXiv, 2022. arXiv:2208.11115 [math].

[2] ———, *Characterizing Multigraded Regularity on Products of Projective Spaces*, arXiv, 2022. arXiv:2110.10705 [math].

[3] L. Chen, A. Gibney, L. Heller, E. Kalashnikov, H. Larson, and W. Xu, *On an Equivalence of Divisors on $\overline{\text{M}}_{0,n}$ from Gromov-Witten Theory and Conformal Blocks*, Transform. Groups (August 2022) (en).

[4] Lauren Cranton Heller, *Galois module structure for Artin-Schreier theory over bicyclic extensions* (2017) (en).

[5] Lauren Cranton Heller, Karen Lange, and Bridget Schreiner, *Searching for categories: a conversation with Eugenia Cheng*, Math Horiz. **25** (2018), no. 3, 22–24. MR3756381

[6] Lauren Cranton Heller, Jan Minac, Tung T. Nguyen, Andrew Schultz, and Nguyen Duy Tan, *Galois module structure of some elementary p-abelian extensions,* Israel J. Math. (2023), to appear. arXiv:2203.02604 [math].

[7] Lauren Cranton Heller and Navid Nemati, *Linear truncations package for Macaulay2,* J. Softw. Algebra Geom. **12** (2022), no. 1, 11–16. MR4538333

INVITED TALKS

SEPTEMBER 2024	**Algebraic and Arithmetic Geometry Seminar** Washington University in St Louis
MAY 2024	**Commutative Algebra Seminar** Mathematical Sciences Research Institute
MAY 2024	**AMS Spring Western Sectional Meeting** San Francisco State University
MAY 2024	**Algebra–Geometry–Combinatorics seminar** San Francisco State University
MARCH 2024	**Academic Sponsors Day** Mathematical Sciences Research Institute
JANUARY 2024	**Joint Mathematics Meetings** San Francisco, CA
OCTOBER 2023	**AMS Fall Central Sectional Meeting** Creighton University
SEPTEMBER 2023	**KUMUNU** University of Missouri
OCTOBER 2022	**Virtual Commutative Algebra Seminar** University of Michigan, Ann Arbor
OCTOBER 2022	**Valley Geometry Seminar** University of Massachusetts, Amherst
OCTOBER 2022	**Algebra and Algebraic Geometry Seminar** McMaster University
OCTOBER 2022	**Combinatorics Seminar** Brown University
OCTOBER 2022	**AMS Fall Eastern Sectional Meeting** University of Massachusetts, Amherst
SEPTEMBER 2022	**Algebra Seminar** Rutgers University, New Brunswick
SEPTEMBER 2022	**Route 81 Conference** Queen's University

SEPTEMBER 2022	**AMS Fall Central Sectional Meeting** University of Texas, El Paso
MAY 2022	**Graduate Meeting on Combinatorial Commutative Algebra** University of Minnesota, Minneapolis
MAY 2022	**AMS Spring Western Sectional Meeting** University of Denver
APRIL 2022	**Virtual Joint Mathematics Meetings**
FEBRUARY 2022	**Algebra and Algebraic Geometry Seminar** McMaster University
NOVEMBER 2021	**Algebra and Geometry Seminar** Queen's University
OCTOBER 2021	**AMS Fall Central Sectional Meeting** Creighton University
APRIL 2021	**American Graduate Student Algebraic Geometry Seminar**

AWARDS

2019	**Outstanding Graduate Student Instructor** *nomination for excellence in teaching by the department*
2016	**Phi Beta Kappa** *honor of being inducted as a junior*
2015	**Malone Sophomore Prize** *highest academic award at Wellesley College, given to a single student in each class year for academic excellence, citizenship, and accomplishment*

SERVICE

AWM student chapter

Noetherian Ring
Berkeley's organization for gender minorities in math

trainings for the prevention of sexual violence and harassment

panels about summer math opportunities, women in math

Equity and Inclusion Committee meetings

reading group on racism in mathematics