

Nicholas Packauskas | CV

Department of Mathematics, University of Nebraska-Lincoln, PO Box 880130

Lincoln, NE, 68588-0130 – USA

☎ (785) 650-1905 • ✉ packauskas@huskers.unl.edu

Education

- **University of Nebraska** **Lincoln**
Ph.D. in Mathematics (May 2019), advised by L. Avramov and M. Walker 2013–present
- **University of Nebraska** **Lincoln**
Master of Science in Mathematics 2013–2015
- **University of Kansas** **Lawrence**
Master of Arts in Mathematics, advised by D. Katz 2010–2013
- **University of Kansas** **Lawrence**
B.S. in Mathematics 2006–2010

Research

Interests.....

Commutative algebra and algebraic geometry. I am particularly interested in homological methods and infinite free resolutions.

Invited Workshops and Summer Schools.....

- *RTG Summer School on Topics in Commutative Algebra* May 2018
A workshop consisting of several major, active research topics in commutative algebra held at the University of Utah from May 7-11 2018.
- *Structures on Free Resolutions* October 2017
A workshop on “Structures on Free Resolutions” and related topics held at Texas Tech University from October 26-28 2017.
- *MSRI Summer School: Commutative Algebra and Related Topics* May 2017
An MSRI summer school consisting of four courses during a two-week period held at the Okinawa Institute of Science and Technology from May 22 - June 2 2017.
- *RTG Workshop on the Homological Conjectures in Commutative Algebra* November 2016
A workshop consisting of three mini-courses at the University of Illinois at Chicago from November 18 - 20 2016.

Expository Papers.....

- *Cohen-Macaulayness and the First Hilbert Coefficient for a Parameter Ideal*
As part of my Master of Arts degree at KU, I wrote an expository paper under the supervision of Daniel Katz.

Talks

Invited Talks.....

- TBD *November 2018*
AMS Sectional meeting, special session on commutative algebra, Lafayette, Arkansas.
- TBD *September 2018*
Creighton Early Career Mathematicians Conference, Omaha, Nebraska.

Local talks.....

- *Free Resolutions* *Fall 2018*
Graduate Student Seminar, University of Nebraska-Lincoln
- *Homotopy Lie Algebra of a Local Ring* *Spring 2018*
Commutative Algebra Reading Seminar, University of Nebraska-Lincoln
- *Introduction to Maximal Cohen-Macaulay Modules* *Spring 2018*
Commutative Algebra Reading Seminar, University of Nebraska-Lincoln
- *Hilbert Polynomials and Multiplicity* *Fall 2017*
Commutative Algebra Reading Seminar, University of Nebraska-Lincoln
- *Andre-Quillen Homology* *Spring 2017*
Commutative Algebra Reading Seminar, University of Nebraska-Lincoln
- *Introduction to Free Resolutions* *Fall 2016*
Commutative Algebra Reading Seminar, University of Nebraska-Lincoln
- *Limits and Co-Limits* *Fall 2015*
Category Theory Seminar, University of Nebraska-Lincoln
- *Multiplicity of Regular Local Rings* *Fall 2013*
Commutative Algebra Reading Seminar, University of Nebraska-Lincoln

Teaching Experience and Development

August 2013 - present, University of Nebraska.....

Instructor of Record

- Math 101, College Algebra *Spring 2018*
- Math 208, Calculus III *Fall 2017*
- Math 223, Differential Equations *Summer 2015, 2016, Spring 2017*
- Math 103, College Algebra and Trigonometry *Fall 2015, 2016*
- Math 203, Contemporary Mathematics *Spring 2016*
- Math 100A, Intermediate Algebra *Fall 2014, Spring 2015*

Teaching Assistant

- Math 208, Calculus III *Fall 2018*
- Math 106, Calculus I *Spring, Summer 2014*
- Math 107, Calculus II *Fall 2013*

Grading

- I have graded several classes for faculty instructors at the University of Nebraska-Lincoln, including the undergraduate courses Applied Calculus, Modern Algebra, and Number Theory. I have also graded the graduate courses Topology and Algebraic Topology.

August 2008 - July 2013, University of Kansas.....

Instructor of Record

- Math 105, Topics in Mathematics *Summer 2013*
- Math 115E, Applied Calculus I: Enhanced Section *Spring 2013*
- Math 115, Applied Calculus I *Fall 2010, Fall 2012*
- Math 116, Applied Calculus II *Fall 2011, Spring 2012*
- Math 002, Intermediate Algebra *Spring 2011*

Teaching Assistant

- Math 105, Topics in Mathematics *Spring 2010*
- Math 365, Elementary Statistics *Fall 2009*
- Math 115, Applied Calculus *Fall 2008*

Pedagogical Development.....

- **Mathematics Department Teaching Mentor Program** *Fall 2016 - present*
I was observed several times by an experienced faculty member (Susan Hermiller) and we met periodically to discuss teaching.
- **Math 896: Teaching and Learning Mathematics** *Fall 2014, Spring 2015*
I completed a three credit-hour course sequence covering fundamental topics in mathematics education and the role of active learning in the classroom.

Service and Professional Development

- **Preparing Future Faculty Fellow** *Summer 2018*
I participated in the PFF program, which is intended to help PhD students understand the job application process and transition to a faculty position.
- **New Student Enrollment, Math Advising Assistant** *Summer 2018*
I worked at New Student Enrollment helping new students choose which mathematics course to take during the upcoming academic year.
- **KUMUNU Jr., Co-Organizer (Co-PI)** *April 2018, 2019*
KUMUNU Jr., Local Co-Organizer *April 2017*
An annual NSF-funded conference for graduate students and post-docs in commutative algebra held at the University of Nebraska-Lincoln.
- **Commutative Algebra Reading Seminar, Co-Organizer** *January 2016 - January 2018*
A seminar for graduate students of the University of Nebraska-Lincoln who are interested in commutative algebra and its related areas.
- **AMS Student Chapter at UNL, President** *Fall 2015 - 2016*
I served in a leading capacity for the graduate student chapter of the American Mathematical Society at the University of Nebraska. My responsibilities included organizing a visiting colloquium speaker, distributing travel funds, and organizing local events.
- **Math Day Volunteer** *2013 - present*
An annual day of math competitions for Nebraska high school students. I helped keep time and proctor during competitions, as well as volunteer at the puzzles and games table.
- **Mathematics Resource Center Counselor** *2013 - present*
One semester each year, I tutored students in lower-level math courses for two hours every week.