

Jason Lutz

Curriculum Vitæ

Gonzaga University
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Employment

- August 2016–present **Assistant Professor of Mathematics**, *Gonzaga University*, Spokane, WA.
- August 2010–July 2016 **Graduate Teaching Assistant**, *University of Nebraska–Lincoln*.

Education

- August 2016 **Ph.D. Mathematics**, *University of Nebraska–Lincoln*.
Advisors: Luchezar Avramov and Srikanth Iyengar
Dissertation Title: *Homological characterizations of quasi-complete intersections*
- May 2012 **M.S. Mathematics**, *University of Nebraska–Lincoln*.
- May 2010 **B.A. Mathematics**, *St. John's University*, Collegeville, MN.
Magna cum laude, All College Honors, Departmental Distinction in Mathematics
Honors Thesis Advisor: Bret Benesh
Honors Thesis Title: *An Analog for a Basis in Finite Groups*

Research Interests

Commutative algebra.

In particular, homological characterizations of local complete intersection rings, quasi-complete intersection ideals, and smooth algebras.

Fellowships and Awards

- 2016 **MAA Project NExT Fellow**, *Mathematical Association of America*.
- 2010 **Outstanding Honors Thesis**, *College of St. Benedict & St. John's University*.
Awarded annually to one undergraduate campus-wide.

Bibliography

Published work

- Thesis.** *Homological characterizations of quasi-complete intersections*.
Ph.D. diss., Department of Mathematics, University of Nebraska–Lincoln, 2016.
Available from <http://digitalcommons.unl.edu/mathstudent/71/>

Unpublished Work

- Article.** *Group bases for some solvable groups and semidirect products*, with B. Benesh.
In preparation. Preprint: <http://arxiv.org/abs/1607.06418>

Work in Progress

- Article.** *Homological characterizations of quasi-complete intersections*. **In preparation.**
Manuscript: <http://connect.gonzaga.edu/lutzj/research>

Talks and Presentations

Invited Talks

April 2017 **1128th AMS Meeting**, Washington State University, Pullman, WA.

April 2016 **KUMUNUjr**, University of Nebraska–Lincoln.
Homological characterizations of quasi-complete intersections.

March 2016 **1117th AMS Meeting**, University of Georgia, Athens, GA.
Homological characterizations of quasi-complete intersections.

Contributed Talks

January 2017 **Joint Mathematics Meetings**, Atlanta, GA.
Homological characterizations of quasi-complete intersections.

Research Seminar Talks

2012 - 2015 **Commutative Algebra Reading Seminar**, University of Nebraska–Lincoln.

2010 - 2013 **Graduate Student Seminar**, University of Nebraska–Lincoln.

Community Talks

October 2016 **Fall Family Weekend**, Gonzaga University.
Fractals and Mysterious Triangles

Teaching Experience

Gonzaga University

Course	Description
Math 147 Precalculus	calculus preparation course
Math 339 Linear Algebra	systems of linear equations; matrices; vector spaces
Math 417 Complex Variables	complex numbers and functions; analyticity and integration

Students advised (semester)	Project Description
Trent DeGiovanni (AY 16-17)	Dissections and decompositions of polygons

University of Nebraska–Lincoln

As Principal Lecturer

Course	Description
Intermediate Algebra	college algebra preparation course
College Algebra	calculus preparation course
College Algebra and Trigonometry	calculus preparation course with trigonometry
Calculus & Analytic Geometry II	integral calculus with sequences and series
Contemporary Mathematics	survey course emphasizing applications of mathematics
Calculus & Analytic Geometry III	vector and multivariable calculus course

As Teaching Assistant

Course	Description
Number Theory & Cryptology	graduate elementary number theory for in-service mid-level mathematics teachers

Grant Supported Activity

2014 - 2016 **KUMUNUjr Co-PI.**
National Science Foundation Division of Mathematical Sciences grants #1401145, #1501798, #1645050

2014 **NebraskaMATH Assistant.**
National Science Foundation Division Of Undergraduate Education grant #1035268

- 2011, 2012 **GAANN Traineeship.**
U.S. Department of Education grant #P00A120068
- 2011 **IMMERSE Assistant.**
National Science Foundation Division of Mathematical Sciences grant #0838463

Workshops

Attended by Invitation

- January 2014 **Macaulay2 Workshop**, *Mathematical Sciences Research Institute, Berkeley, CA.*
- August 2012 **Macaulay2 Workshop**, *Wake Forest University, Winston-Salem, NC.*

Service

- April 2017 **Session Co-organizer: 1128th AMS Meeting**, *Washington State University.*
Special Session on Commutative Algebra
- January 2017 **Session Co-chair: AMS Contributed Paper Session**, *Atlanta, GA.*
Session on Commutative Algebra, Linear and Multilinear Algebra and Matrix Theory
- January 2017 **Judge**, *Mathematical Association of America Undergraduate Poster Session.*
- 2016 **Tenure-track Search Committee, Mathematics Department**, *Gonzaga University.*
- 2016 **Department of Mathematics Major Review Committee**, *Gonzaga University.*
- 2016 **Education Liaison**, *Gonzaga University Mathematics Department.*
- January 2016 **Judge**, *Mathematical Association of America Undergraduate Poster Session.*
- 2013 - 2015 **Co-organizer: KUMUNUjr**, *University of Nebraska-Lincoln.*
KUMUNUjr is a conference for graduate students and postdocs studying commutative algebra in the Midwest; it is modeled after KUMUNU.
- 2014 **UNL Precalculus Orientation**, *Panelist.*
Talking with Experienced Graduate Teaching Assistants
- AY 2013-2014 **UNL Graduate Advisory Committee**, *Graduate Student Representative.*
- AY 2012-2013 **UNL Graduate Student Seminar**, *Co-organizer.*
- 2011 **UNL Graduate Student Orientation**, *Panelist.*
How to Survive Graduate School
- 2011 **Nebraska Conference for Undergraduate Women in Mathematics.**
Registration; table host
- 2010-2012 **UNL Graduate Student Advisory Board**, *Representative.*
- 2010-2015 **UNL Annual Math Day.**
Math Bowl Moderator; PROBE I Proctor

Professional Development

- 2016 **Math Teaching Circle**, *Gonzaga University.*
- 2016 **Teaching Squares**, *Gonzaga University.*
Novel approaches to providing meaningful feedback to students.
- 2014 **Preparing Future Faculty**, *University of Nebraska-Lincoln.*
- 2014 **Professional Development Seminar**, *University of Nebraska-Lincoln.*
- 2011 **Teaching Seminar**, *University of Nebraska-Lincoln.*
- 2010 **Graduate Teaching Assistant Workshop**, *University of Nebraska-Lincoln.*

Professional Memberships

American Mathematical Society
Mathematical Association of America
Phi Beta Kappa