JESSE D. KEYES

Department of Mathematics

University of Kentucky

Phone: 859-582-9239

Website: math.as.uky.edu/users/

jdke228

Lexington, KY 40506

E-mail: jdke228@uky.edu

ACADEMIC POSITIONS

University of Kentucky, Lexington, KY

Graduate Teaching Assistant

EDUCATION

University of Kentucky, Lexington, KY

• M.A. Mathematics

Eastern Kentucky University, Richmond, KY

• B.S. Mathematics

Budapest Semester in Mathematics, Budapest, Hungary

• Semester Abroad (Spring 2019)

INVITED TALKS

- Eastern Kentucky University Symposium in the Mathematical, Statistical, and Computer Sciences Algebraic Invariants in Topology (April 2025)
- AMS Special Session on Homotopy Theory and Algebraic K-Theory Bredon Homology and The Burnside Mackey Functor (March 2025)

CONTRIBUTED TALKS

- Graduate Student Topology and Geometry Conference (GSTGC) Bredon Homology and The Burnside Mackey Functor (April 2025)
- Eastern Kentucky University Symposium in the Mathematical, Statistical, and Computer Sciences An Introduction to Equivariant Stable Homotopy Theory (April 2023)

PREPRINTS

- The $RO(\mathcal{K})$ -graded Coefficients of $H\underline{A}$: https://arxiv.org/abs/2503.03173
- The $RO(\mathcal{K})$ -graded Homotopy of Klein-four normed Mackey functors: https://arxiv.org/abs/2507.12423

SEMINAR TALKS

- University of Kentucky Topology Seminar
 - An Introduction to Bredon Homology Valued in Mackey Functors (Oct 2022)
 - The Picard Group of the C_n -Equivariant Stable Homotopy Category (April 2023)

- The Bigraded Homotopy of C_2 -Equivariant $H\underline{\mathbb{A}}$ (Oct 2023)
- The Tate Method and Equivariant Eilenberg-MacLane Spectra (March 2024)
- Bredon Homology and the Burnside Mackey Functor (January 2025)
- eCHT Kan Seminar
 - Homotopy Theory and Model Categories (Sept 2023)

SEMINARS AND WORKSHOPS

- Talbot Workshop Topological Cyclic Homology of Ring Spectra (Fall 24)
- eCHT Research Workshop on Hopf Rings (Summer 24)
- eCHT Hopf Rings Seminar (Spring 24)
- eCHT Kahn Seminar (Fall 23)
- Equivariant Homotopy Theory in Context Introduction to Equivariant Homotopy Theory (Spring 25)
- Equivariant Homotopy Theory in Context New Horizons For Equivariance in Homotopy Theory (Spring 2025)

TEACHING EXPERIENCE

Primary Instructor:

- University of Kentucky
 - MA 113: Calculus 1 (Summer 2022)

Recitation Leader

- University of Kentucky
 - MA 113: Calculus 1 (Fall 2022)
 - MA 114: Calculus 2 (Spring 2023, 2024)
 - MA 213: Calculus 3 (Fall 2023)
 - MA 162: Finite Math & Its Applications Lead TA (Spring 2025)

Grader

- University of Kentucky
 - MA 322: Matrix Algebra and Applications (Fall 2024)