

Jacob W. Mashburn

Department of Mathematics,
Texas A&M University
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EDUCATION

Texas A&M University, College Station, TX
PhD, Mathematics (Advisor: Dr. Michael Anshelevich)
Dissertation: *Distributions and von Neumann Algebras over Fock Spaces with Depth-Two Action* August 2016 - August 2022

Texas A&M University, College Station, TX
BA, Mathematics
August 2012 - May, 2016

RESEARCH INTERESTS

Free probability theory, operator algebras, stochastic processes

PUBLICATIONS

- Forthcoming. Anshelevich, M.; and Mashburn, J. “Some Fock spaces with depth two action.” arXiv:2103.13936.
- Forthcoming. Anshelevich, M.; and Mashburn, J. “Fock representation of free convolution powers.” arXiv:2207.12481

TEACHING EXPERIENCE

TAMU Graduate Instructor of Record

Jan 20 - Aug 22

- Summer 2022: Explorations in Mathematics (in-person)
- Spring 2022: Explorations in Mathematics (hybrid)
- Summer 2021: Business Calculus (remote)
- Spring 2021: Explorations in Mathematics (remote)
- Spring 2020: Explorations in Mathematics (in-person, remote from March to the end of the semester)

TAMU Graduate Teaching Assistant

Aug 16 - Dec 21

- Fall 2021: Engineering Calculus II (Recitations and Python Instruction)
- Summer 2021: Explorations in Mathematics (Grader)
- Fall 2020: Engineering Calculus I (Recitations and Python Instruction)
- Summer 2020: Advanced Calculus I (Help Sessions)
- Summer 2020: Explorations in Mathematics (Mentor to another Graduate Instructor of Record)
- Fall 2019: Engineering Calculus I (Recitations and Python Instruction)
- Summer 2019: Engineering Calculus II (Help Sessions)
- Spring 2019: Engineering Calculus II (Recitations and Python Instruction)
- Fall 2018: Engineering Calculus II (Recitations and MATLAB Instruction)
- Summer 2018: Mathematical Probability (Grader)
- Spring 2018: Engineering Calculus II (Recitations and MATLAB Instruction)
- Fall 2017: Engineering Calculus I (Recitations and MATLAB Instruction)
- Summer 2017: Business Calculus (Help Sessions)
- Spring 2017: Mathematics of Contingent Claims (Grader)
- Fall 2016: Mathematical Probability (Grader)

**EXTRA-
CURRICULAR**

TAMU Mathematics Department Graduate Student Organization August 2019 - May 2022

- Coordinated weekly seminar for mathematics graduate students to share their research interests.

TALKS GIVEN

- April 2022: **Gathering In Graduate Expository Mathematics (GIG'EM) Conference**, *Texas A&M University (invited)*
- November 2021: **Pure Mathematics Seminar**, *Lancaster University (invited, remote)*
- October 2021: **Graduate Student Organization Seminar**, *Texas A&M University*
- October 2021: **Probabilistic Operator Algebra Seminar (POAS)**, *University of California, Berkeley (invited, remote)*
- September 2021: **Graduate Student Organization Seminar**, *Texas A&M University*
- August 2021: **Young Mathematicians in C*-Algebras**, *Westfälische Wilhelms-Universität Münster (poster, remote)*
- May 2021: **Great Plains Operator Theory Symposium**, *Washington University in St. Louis (remote)*
- January 2020: **Graduate Student Organization Seminar**, *Texas A&M University*
- February 2019: **Gathering In Graduate Expository Mathematics (GIG'EM) Conference**, *Texas A&M University*

**CONFERENCES
ATTENDED**

- April 2022: **Gathering In Graduate Expository Mathematics (GIG'EM) Conference**, *Texas A&M University (invited)*
- August 2021: **Young Mathematicians in C*-Algebras**, *Westfälische Wilhelms-Universität Münster (poster, remote)*
- June 2021: **Online Workshop on Stochastic Analysis**, *University of New Mexico (remote)*
- May 2021: **Great Plains Operator Theory Symposium (GPOTS)**, *Washington University in St. Louis (remote)*
- March 2021: **Gathering In Graduate Expository Mathematics (GIG'EM) Conference**, *Texas A&M University*
- October 2019: **East Coast Operator Algebra Symposium (ECOAS)**, *The Ohio State University*
- May 2019: **Great Plains Operator Theory Symposium (GPOTS)**, *Texas A&M University*
- February 2019: **Gathering In Graduate Expository Mathematics (GIG'EM) Conference**, *Texas A&M University*
- May 2018: **IPAM Workshop on Random Matrices and Free Probability**, *University of California, Los Angeles*