

Jean Pierre Mutanguha

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Research Interests

Interested in geometric group theory: recently, I have been working on relating various dynamical properties of free group endomorphisms to algebraic or geometric properties of their mapping tori.

Education

PhD Candidate in Mathematics 2014-Present

University of Arkansas

Dissertation: Hyperbolic Endomorphisms of Free Groups [Expected May 2020]

Advisor: Prof. Matt Clay

BSc in Mathematics 2011-2014

Oklahoma Christian University

Honors Project: *Point-Set Topology and Unique Trigonometric Series Representation*

Minor: Finance

Academic Recognition

William Alton Anderson Endowed Scholarship	2019-2020
Lawrence Jesser Toll Jr. Endowed Fund	2018-2019
John C Massie Memorial Fund	2017-2018
Lawrence Jesser Toll Jr. Endowed Fund	2015-2017
Outstanding MCIS Senior	2014
MCIS Alumni Scholarship	2013

Research Articles

Irreducibility of a Free Group Endomorphism is a Mapping Torus Invariant.

submitted. arXiv:1910.04285 [math.GR]

Irreducible Nonsurjective Endomorphisms of F_n are Hyperbolic.

submitted. arXiv:1908.08214 [math.GR]

Hyperbolic Immersions of Free Groups.

to appear in *Groups Geom. Dyn.* arXiv:1809.04761 [math.GR]

Invited and Contributed Talks

AMS Special Session – Charlottesville, VA.	Mar. 2020
2019 Fall Redbud Topology Conference – Stillwater, OK.	Nov. 2019
Topology & Group Theory Seminar – Nashville, TN.	Oct. 2019
Summer 2019 Wasatch Topology Conference – Midway, UT.	Aug. 2019
GAGTA 2019 – Tel Aviv, Israel.	May 2019
GGD/GEAR Seminar – Urbana-Champaign, IL.	Apr. 2019
GSTGC 2019 – Urbana-Champaign, IL.	Mar. 2019
AMS Special Session – Auburn, AL.	Mar. 2019
Manhattan Algebra Day 2018 – New York, NY.	Dec. 2018
AMS Special Session – Fayetteville, AR.	Nov. 2018

Attended Conferences/Workshops

*Aspects of Nonpositive and Negative Curvature in Group Theory – Luminy, France.	June 2019
*2019 Spring Redbud Topology Conference – Norman, OK.	Apr. 2019
Summer 2018 Wasatch Topology Conference – Midway, UT.	Aug. 2018
GAGTA 2018 – Seoul, South Korea.	July 2018
Topology Students Workshop – Atlanta, GA.	June 2018
Geometry of Outer Spaces and Outer Automorphism Groups – Warwick, UK.	Apr. 2018
*YGGT VII – Les Diablerets, Switzerland.	Mar. 2018
2017 Spring Redbud Topology Conference – Fayetteville, AR.	Apr. 2017
Tech Topology Conference – Atlanta, GA.	Dec. 2016
MSRI Introductory Workshop: Geometric Group Theory – Berkeley, CA.	Aug. 2016
2016 Spring Redbud Topology Conference – Norman, OK.	Apr. 2016

* *Presented a 5-min lightning talk.*

Teaching Experience

University of Arkansas	2014-Present
<i>Instructor of Record</i> ⁺ / <i>Teaching Assistant</i> ^o	
Survey of Calculus ⁺ , College Algebra ⁺ , Finite Math ⁺	
Calculus 3 ^{+o} , Differential Equations ^o	

Skills

<i>Multilingual:</i>	English, French, Kinyarwanda, Kiswahili
<i>Software:</i>	JAVA, NODEJS, PYTHON, L ^A T _E X, R, SAGE