Derrick Wigglesworth

CONTACT
INFORMATION

University of Utah
Department of Mathematics
Salt Lake City, UT 84112

mobile: (301) 802-1431
e-mail: dwiggles@math.utah.edu
website: math.utah.edu/~dwiggles

RESEARCH
INTERESTS

Geometric group theory, outer automorphism groups of free groups and RAAGs, mapping class groups, Farrell-Jones conjecture and other connections between topology and algebra

EDUCATION AND
POSITIONS HELD

Fields Institute, Toronto, Ontario, Canada   [July – December 2018]
Postdoctoral Fellow

University of Utah, Salt Lake City, Utah, USA   [August 2012 – May 2018]
Doctor of Philosophy, Advisor: Mladen Bestvina

University of Maryland, College Park, Maryland, USA   [2009 – 2012]
Bachelor of Mathematics, Magna Cum Laude
Bachelor of Physics, Magna Cum Laude

HONORS AND
AWARDS

Dept. of Mathematics Outstanding Graduate Student Award, University of Utah, 2017.
Dept. of Mathematics Outstanding Senior Award, University of Maryland, 2013.
Dept. of Mathematics Higginbotham Award, University of Maryland, 2012.

PUBLICATIONS

- D. Wigglesworth, *"Distortion for abelian subgroups of $Out(F_n)$"*, to appear in International Journal of Algebra and Computation.

- R. Gupta and D. Wigglesworth, *"Loxodromics for the cyclic splitting complex and their centralizers"*, arXiv:1710.10478.

- M. Bestvina and K. Fujiwara and D. Wigglesworth, *"Farrell-Jones conjecture for free-by-cyclic groups"*, in preparation.

TEACHING
EXPERIENCE

University of Utah, Salt Lake City, Utah, USA

- *Introduction to Quantitative Analysis*   [Fall 2012, Spring 2013, Spring 2014]
- *Trigonometry*   [Fall 2013]
- *Calculus I*   [Summer 2013, Summer 2016]
- *Calculus II*   [Summer 2014]
- *Linear Algebra*   [Fall 2015, Fall 2017]

TALKS

- Ergodic Theory Seminar, University of Rennes 1   March 2018
- Topology Seminar, UC Berkeley   February 2018
- Joint Math Meetings, San Diego, CA   January 2018
- AMS Fall Western Sectional, UC Riverside   November 2017
- Max Dehn Seminar, Univ. of Utah   February 2017
- $Out(F_n)$-Complexes Seminar, MSRI   October 2016
- Graduate Student Seminar, MSRI   September 2016
- Topology Students Workshop, GA Tech   June 2016

PROGRAMMING

Python, Matlab, Sage, LaTeX 2_ε.

- Geometry of outer spaces and outer automorphism groups, Univ. of Warwick   April 2018
- Geometry of Teichmuller space and mapping class groups, Univ. of Warwick   April 2018
- Topological and Homological Methods in Group Theory, Bielefeld Univ., Germany April 2018
- Young Geometric Group Theory VII, Les Diablerets, Switzerland   March 2018
- Groups Explored through Topology & Geometry, Princeton Univ.   Sept 2017
- Shanks Conference in Low Dim'l Topology & Geom, Vanderbilt Univ.   May 2017
- MSRI Program Associate, Berkeley CA   August-December, 2016
- Topology Students Workshop, Georgia Tech   June, 2016
- Workshop on Mapping Class Groups and $Out(F_n)$, UT Austin   May, 2015
- 33rd, 34th, 35th, 37th, 38th Wasatch Topology Conferences, University of Utah

Service
- Graduate Student Advisory Committee Cochair   [2017-2018]
- College of Science Council   [2017-2018]
- TA Training Facilitator   [Fall 2017]
- Retention Promotion & Tenure Committee   [2015-2016]
- Math Teacher's Circle (Workshop for K12 educators)   [Fall 2017]

Outreach Talks
- Undergraduate Colloquium: *"Games of No Chance"*   [Sept 2017]
- Graduate Colloquium: *"Limitations of a Ruler & Compass"*   [Aug 2017]
- Graduate Colloquium: *"Turing Machines and the Halting Problem"*   [Sep 2014]
- Graduate Colloquium: *"Hilbert's Program & Gödel's Incompleteness Theorem"*   [Feb 2014]

REFERENCES

Mladen Bestvina
University of Utah
e-mail: *bestvina@math.utah.edu*

Mark Feighn
Rutgers-Newark
e-mail: *feighn@rutgers.edu*

Dan Margalit
Georgia Tech
e-mail: *margalit@math.gatech.edu*

Arnaud Hilion
Aix Marseille Université, CNRS
e-mail: *arnaud.hilion@univ-amu.fr*

Kelly MacArthur (Teaching)
University of Utah
e-mail: *macarthu@math.utah.edu*