# Krzysztof Święcicki

### Personal Data

Date of Birth 20 March 1989

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# **Employment**

2022-present Associate Professor, Wrocław University of Science and Technology.

2021–2022 Assistant Professor, Wrocław University of Science and Technology.

#### Education

- 2021 Ph.D. in mathematics, Texas A&M University. Thesis: "Nonlinear Embeddings into Banach Spaces". Advisors: Guoliang Yu, Florent Baudier.
- 2013 M.Sc. in mathematics, University of Warsaw. Thesis: "Helly's theorem for systolic complexes". Advisor: Paweł Zawiślak.
- 2012 B.Sc. in mathematics, University of Warsaw. Thesis: "Lorentz group and pseudo-orthogonal groups". Advisor: Stefan Jackowski.

### **Articles**

No dimension reduction for doubling subsets of  $\ell_q$  when q>2 revisited, J. Math. Anal. Appl. 504, (2021), no. 2, 125407

Equivariant coarse embeddability into  $\ell_p$  implies isomorphic embeddability, for  $p \neq 2$ , submitted, preprint available on arXiv:2012.00097.

Helly's theorem for systolic complexes, submitted, preprint available on arXiv:1405.5194.

#### **Talks**

- Sep 2023 Groups and Rigidity Around the Zimmer Program, Ventotene, Italy.
- Aug 2022 Glasgow Late August Symbolic Dynamics, Groups, and Operators Workshop, Glasgow, Scotland.
- Nov 2021 Banach spaces webinar, Denton, Texas.
- Nov 2021 Geometry Seminar, Wrocław, Poland.
- Apr 2019 Redbud topology conference, Norman, Oklahoma.
- Feb 2019 The Gathering in Graduate Expository Mathematics, College Station, Texas.
- Apr 2016 Graduate Student Topology & Geometry Conference, Bloomington, Indiana.
- Jun 2015 30th Summer Conference on Topology and its Applications, Galway, Ireland.

- Jun 2014 Differential Geometry and Topology Seminar, Wrocław, Poland.
- May 2014 Geometric structures and representation varieties junior retreat, Ann Arbor, Michigan.
- Apr 2014 Groups and Dynamics Seminar, College Station, Texas.
- Feb 2014 Texas A&M, Graduate Student Seminar, College Station, Texas.
- May 2013 Geometric Group Theory Student Workshop, Bedlewo, Poland.
- Jan 2013 Geometric Group Theory Seminar, Warsaw, Poland.
- Feb 2012 Workshop in Differential Topology, Warsaw, Poland.

# Selected Conferences and Workshops

- Jul 2019 Young geometric group theory VIII, Bilbao, Spain.
- Jun 2019 Simons semester on geometric and analytic group theory, Warsaw, Poland.
- Jan 2019 Groups of dynamical origin II, Mexico City, Mexico.
- Sep 2018 Workshop on Analysis on Groups and Measured Group Theory, Austin, Texas.
- Mar 2018 7th Young Geometric Group Theory Meeting, Les Diablerets, Switzerland.
- Feb 2017 Groups of dynamical origin, Mexico City, Mexico
- Dec 2016 Amenability, coarse embeddability and fixed point properties, Berkeley, California.
- Oct 2016 Geometry of mapping class groups and Out(Fn), Berkeley, California.
- Jul 2016 Large scale dimensions, Regensburg, Germany.
- Jun 2016 Geometric topology workshop, Colorado Springs, Colorado.
- May 2016 Cornell topology festival, Ithaca, New York.
- Apr 2016 Shanks workshop on geometric methods in group theory, Nashville, Tennessee.
- Feb 2016 ESI winter school: Measured group theory, Vienna, Austria.
- Nov 2015 Geometric and probabilistic methods in group theory and dynamical systems, College Station, Texas.
- Nov 2015 Texas Geometry and Topology Conference, Houston, Texas.
- Aug 2015 Invariants in Low Dimensional Geometry, Ankara, Turkey.
- Aug 2015 Workshop on Invariants of Knots, Surfaces, and 3-Manifolds, Ankara, Turkey.
- Jun 2015 Conference on Geometric group theory, Wrocław, Poland.
- Jun 2015 Growth, Symbolic Dynamics and Combinatorics of Words in Groups, Paris, France.
- Mar 2015 Graduate Student Topology & Geometry Conference, Urbana-Champaign, Illinois.
- Jan 2015 4th Young Geometric Group Theory Meeting, Spa, Belgium.
- Jun 2014 Growth in groups, Neuchatel, Switzerland.
- May 2014 Geometric structures and representation varieties junior retreat, Ann Arbor, Michigan.
- Apr 2014 Rice Dynamics Meetings, Houston, Texas.

- Apr 2014 Redbud topology conference, Norman, Oklahoma.
- Mar 2014 Geometric groups on the gulf, Pensacola, Florida.
- Jan 2014 3rd Young Geometric Group Theory Meeting, Luminy, France.
- Apr 2013 Winter School on Analysis, Bedlewo, Poland.
- Feb 2013 2nd Young Geometric Group Theory Meeting, Haifa, Israel.
- Sep 2012 Graphs and Groups, Lille, France.
- Jul 2012 PCMI/IAS Graduate Summer School on Geometric Group Theory, Park City, Utah.
- Jan 2012 1st Young Geometric Group Theory Meeting, Bedlewo, Poland.

## Grants & Awards

- 2021 Kovalevskaya grant for early career mathematicians.
- 2013 2nd prize, Polish Mathematical Society Józef Marcinkiewicz Memorial Prize for the Best Student Paper in Mathematics.

# Organizing

- 2019 Working Seminar on Bass-Serre Theory
- 2015-2021 Student Working Seminar in Groups Dynamics, and https://www.math.tamu.edu/justincc/swsgd/swsgd.html
- 2010-2011 Seminar on Quantum Field Theories, http://qft.mimuw.edu.pl/

# Selected Outreach

- 2017 volunteer at high school math contest at Texas A&M
- 2015 volunteer at TAMU Science Career Fair
- 2015 volunteer at Pi Day of the Century at Texas A&M
- 2010 volunteer at the Science Picnic, Warsaw, Poland

# Teaching experience

# Instructor of Record / Lecturer

- Analiza I (Analysis I) Fall 2022, Fall 2023
- Mathematics (for Economists) Spring 2023
- Math Modeling Spring 2022, Spring 2023
- - Math 142 (Business Calculus) Summer 2017

#### Recitations / TA

- Algebra I (Linear algebra I) Fall 2021, Fall 2023
- Analiza I (Analysis I) Fall 2021, Fall 2022, Fall 2023
- Analiza II (Analysis II) Spring 2022
- Mathematics (for Economists) Spring 2023
  - Math 666 (Seminar in Geometry) Summer 2020

- Math 151 (Engineering Mathematics I), Fall 2019, Spring 2019, Fall 2015
- Math 152 (Engineering Mathematics II), Spring 2020, Spring 2018, Spring 2016 (honors)

## Grading

- Math 666 (Seminar in Geometry) Summer 2020
- Math 656 (Functional Analysis I), Fall 2017
- Math 636 (Topology I) Fall 2018 & Fall 2016
- Math 467 (Modern Geometry) Spring 2021, Fall 2020, Spring 2016
- Math 409 (Advanced Calculus I) Fall 2014
- Math 323 (Linear Algebra) Summer 2013

### Help Sessions

- Math 409 (Advanced Calculus I) Summer 2019 & Summer 2018
- Math 323 (Linear Algebra) Spring 2014 & Fall 2013
- Math 308 (Differential Equations) Summer 2016

# Interdisciplinary Experience

- 2010 Institute of Theoretical Physics, University of Warsaw, Warsaw, Poland Summer project on Loop Quantum Gravity with Jerzy Lewandowski.
- 2009 Ultrafast Phenomena Lab, University of Warsaw, Warsaw, Poland Summer project on Fluorescence Microscopy with Czesław Radzewicz.

## Skills

- programming Python, C++, Pascal
  - software LATEX, Matlab, LabVIEW
  - languages Polish (native), English (fluent), German (basic)