

Maxwell Stolarski, PhD

CONTACT INFORMATION	Email: Max.Stolarski@warwick.ac.uk Website: homepages.warwick.ac.uk/~u2175999 Mathematics Institute Zeeman Building University of Warwick Coventry, CV4 7AL United Kingdom
PERSONAL INFORMATION	Date of Birth: December 29, 1990 Citizenship: United States
APPOINTMENTS	University of Warwick , Mathematics Institute Warwick Zeeman Lecturer, September 2022–June 2025 Arizona State University , School of Mathematical and Statistical Sciences Postdoctoral Scholar, September 2019–May 2022
EDUCATION	The University of Texas at Austin Ph.D. in Mathematics, May 2019 Advisor: Dan Knopf Thesis Title: <i>Curvature Blow-Up in Doubly-Warped Product Metrics Evolving by Ricci Flow</i> Thesis Research Area: Geometric Analysis The University of Chicago B.Sc. in Mathematics (Honors), June 2013
RESEARCH AREAS	<ul style="list-style-type: none">• Geometric Analysis• Geometric Flows• Nonlinear Parabolic and Elliptic PDEs• Differential Geometry
PAPERS	<i>On the Structure of Singularities of Weak Mean Curvature Flows with Mean Curvature Bounds</i> Preprint at arXiv:2311.16262, November 2023, 33 pages <i>Closed Ricci Flows with Singularities Modeled on Asymptotically Conical Shrinkers</i> Preprint at arXiv:2202.03386, February 2022, 89 pages <i>Existence of Mean Curvature Flow Singularities with Bounded Mean Curvature</i> <i>Duke Math. J.</i> 172 (7) 1235–1292, 15 May 2023. <i>Curvature Blow-Up in Doubly-Warped Product Metrics Evolving by Ricci Flow</i> <i>Memoirs of the AMS</i> (to appear, accepted August 2021), 138 pages <i>Steady Ricci Solitons on Complex Line Bundles</i> <i>Commun. Anal. Geom.</i> (to appear 2024, accepted March 2022), 35 pages

AWARDS

Leverhulme Trust Early Career Fellowship (ECF-2023-182)
The Leverhulme Trust, 2023–2026

AMS-Simons Travel Grant

The American Mathematical Society and Simons Foundation, 2021–2023

Frank Gerth III Dissertation Award

The University of Texas at Austin, 2019

Frank Gerth III Teaching Excellence Award

The University of Texas at Austin, 2015

Phi Beta Kappa

Academic Honor Society

Viola K. Bower Memorial Scholarship

Full-Tuition Scholarship

The University of Chicago, 2009–2013

TEACHING

Instructor, University of Warwick

- Differential Geometry (MA4C0), Fall 2022

Instructor, Arizona State University

- Kähler and Complex Geometry (MAT 598), Fall 2021
- Intro to Mathematical Proofs (MAT 300), Spring 2021
- Point-Set Topology (MAT 410), Fall 2020
- Ordinary Differential Equations (MAT 275), Summer 2020, Spring 2022
- Multivariable Calculus (MAT 267, 272), Fall 2019 – Spring 2020

Teaching Assistant, The University of Texas at Austin

- Differential Equations with Linear Algebra (M427J), Fall 2018
- Calculus for Biologists (M408R), Spring 2018
- Multivariable Calculus (M408D), Fall 2016, Fall 2014, Spring 2014
- Point-Set Topology (M367K), Fall 2015
- Differential Calculus (M408K), Spring 2015
- Differential and Integral Calculus (M408C), Fall 2013

Teaching Assistant, The University of Chicago

- Differential, Integral, and Multivariable Calculus (MATH 13100–13300),
Academic Year 2010–2011

INVITED
PRESENTATIONS

*On the Structure of Singularities of Mean Curvature Flows with Mean Curvature
Bounds*

Queen Mary University London, Geometry, Analysis, and Gravitation Seminar,
November 21, 2023

ICMS, Geometric Flows and Applications Workshop, July 11, 2023

University of Münster, Geometry Seminar, June 12, 2023

Closed Ricci Flows with Singularities Modeled on Asymptotically Conical Shrinkers

University of Cambridge, PDE Seminar, January 23, 2023
University College London, Geometry Seminar, November 23, 2022
University of Warwick, Analysis Seminar, November 17, 2022
University of Leeds, Geometry & Analysis Seminar, November 9, 2022
University of Oxford, Geometry & Analysis Seminar, October 31, 2022
Universität Magdeburg, Geometric Analysis Seminar, October 27, 2022
Sorbonne Université (IMJ-PRG), Analysis & Geometry Seminar, October 18, 2022
University of Science and Technology of China, Geometry & Topology Seminar,
May 12, 2022
University of Oregon, Geometric Analysis Seminar, May 10, 2022
University of California San Diego, Differential Geometry Seminar, April 7, 2022

Existence of Mean Curvature Flow Singularities with Bounded Mean Curvature

University of Warwick, Geometric PDEs Conference, December 16, 2022
Banff International Research Station, New Directions in Geometric Flows
Workshop, November 9, 2021
University of Wisconsin Madison, PDE/Geometric Analysis Seminar,
October 25, 2021
Johns Hopkins University, Analysis & PDE Seminar, February 15, 2021
Columbia University, Geometry & Analysis Seminar, January 22, 2021
Rutgers University, Geometric Analysis Seminar, September 22, 2020

Ricci Flow of Doubly-Warped Product Metrics

California Institute of Technology, Geometry Seminar, October 25, 2019
University of California Berkeley, Differential Geometry Seminar,
October 7, 2019
University of California Santa Cruz, Geometry & Analysis Seminar,
January 18, 2018
Joint Mathematics Meetings, Special Session on Geometric Analysis and
Geometric Flows, January 10, 2018

Steady Ricci Solitons on Complex Line Bundles

EGEO 2016 Workshop on Differential Geometry, August 1, 2016

OUTREACH &
MENTORSHIP

Undergraduate & Master's Research Project Supervisor, University of
Warwick

- Master's (4th Year) Research Project on Minimal Surfaces, 2023–24
- 3rd Year Essays on Sard's Theorem & the Whitney Embedding Theorem,
2022–23, 2023–24

Honors Contract Mentor, Arizona State University

- Topology and Redistricting, Fall 2020
- Supplemental Topics in Multivariable Calculus, Fall 2019

Austin Gerrymandering Workshop Volunteer & Contributing Speaker

The University of Texas at Austin, February 1–4, 2018

Directed Reading Program Mentor, The University of Texas at Austin

- Minimal Surfaces, Spring 2017
- Chemical Reaction Networks, Fall 2016
- Quadratic Reciprocity, Spring 2015

**Texas Undergraduate Topology & Geometry Conference (texTAG)
Co-Organizer**

The University of Texas at Austin, February 27–28, 2016

Graduate Student Topology & Geometry Conference Volunteer

The University of Texas at Austin, April 5–6, 2014

Young Scholars Program Instructor

Summer Math Program for Advanced Students from Chicago Public Schools
The University of Chicago, Summer 2013

SESAME Program Teaching Assistant

Continuing Education Program for Chicago Public Schoolteachers
The University of Chicago, Summer 2011

PROFESSIONAL
ACTIVITIES

Analysis Seminar Organizer

University of Warwick, Spring 2023–Present

Early Career Committee Member

University of Warwick, Fall 2022–Present

Differential Geometry Seminar Organizer

Arizona State University, Fall 2019–Spring 2022

PDE Seminar Organizer

Arizona State University, Fall 2019–Spring 2022

Referee

Advances in Mathematics, Calculus of Variations and PDE, Communications in Analysis and Geometry, Communications in Contemporary Mathematics, International Mathematics Research Notices

Sophex Seminar Organizer

The University of Texas at Austin, Fall 2014