Stephen James Kleene

University of Rochester Department of Mathematics
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Education

Ph.D. in Mathematics, The Johns Hopkins University, 2010.
Dissertation: *Singular behavior of minimal surfaces and mean curvature flow.*
Advisor: William P. Minicozzi II.

B.A. in Mathematics, University of Rochester, 2005.

Employment

University of Rochester, NY, USA. *2015-*
Assistant professor (Department of Mathematics).

Brown University, Providence, RI, USA. *2014-2015*
Visiting assistant professor (Department of Mathematics).

MIT(Massachusetts Institute of Technology), Cambridge, MA, USA. *2010-2014*
CLE Moore Instructor (Department of Mathematics).

Visiting Positions

Visiting Member, MSRI, Spring 2016.

Research Interests

Riemannian and Conformal Geometry, Minimal Surfaces, Mean Curvature Flow, Nonlinear PDE's, Mathematical Physics.

Publications

[1] C. Breiner and S. J. Kleene *Group actions in the existence and classification of constant mean curvature surfaces*, Advanced Lectures in Mathematics, Handbook of Group Actions vol. III (2018) 461484.

[2] N. Kapouleas, S. J. Kleene, N. M. Møller, *Mean curvature self shrinkers of high genus: Non-compact examples*, J. Reine Angew. Math. **739** (2018) pp 1-39.

[3] C. Breiner and S. J. Kleene, *Logarithmically spiraling Helicoids*, to appear, Commun. Anal. Geom **26**(2018) no. 3, 461-504.

[4] G. Drugan and S. J. Kleene, *Immersed self shrinkers*, Trans. Amer. Math. Soc., **369** (2017), no. 10 7213-7250.

[5] C. Breiner and S. J. Kleene, *A minimal lamination of the interior of a positive cone with quadratic curvature blowup*, J. Geom. Anal **25** (2015) 1409-1420.

[6] S. J. Kleene, N. M. Møller, *Self shrinkers with a rotational symmetry*, Trans. Amer. Math. Soc., **366** (2014), no. 8, 3943-3963.

[7] S. J. Kleene, *A minimal lamination with cantor set-like singularities.*, Proc. Am. Math. Soc., **140** (2012), no.4.

[8] M Calle, S J Kleene, and J Kramer, *Width and flow of hypersurfaces by curvature functions*, Trans. Amer. Math. Soc., **363** (2011), no. 3, 1125-1135.

Submitted Preprints

[1] S. J. Kleene, *Minimal laminations with prescribed convex curvature blowup*

Articles in Preparation

[1] S. J. Kleene, X. H. Nguyen *Desingularizing non-degenerate surfaces*, submitted.

[2] S. J. Kleene, R. Magnus *Small angle desingularizations for Catenoids I*, in preparation.

[3] S. J. Kleene, R. Magnus *Small angle desingularizations for Catenoids II*, in preparation.

[4] S. J. Kleene, *Doubling generic spheres*, in preparation.

Academic Awards and Honors

NSF(National Science Foundation) Postdoctoral Research Fellow. *2010-2014*

Highest Distinction in Mathematics, University of Rochester. *2005*

Talks in Seminars and Conferences

UC Santa Cruz *10/2019*
Geometry Seminar

Syracuse University *12/2018*
Geometry Seminar

CUNY *12/2018*
Geometry Seminar

University of Rochester *12/2018*
Geometry Seminar

Central Connecticut State University *11/2018*
Department of Mathematics Colloquium

AMS Sectional Meeting *9/2017*
Special Session on Recent Progress in Geometric Analysis

Cornell University *11/2016*
Geometric Analysis Seminar.

University of Toronto *11/2016*
Geometric Analysis Seminar.

MSRI *3/2016*
Program in Differential Geometry.

AMS Sectional Meeting *3/2016*
Special Session on Geometric Analysis and Flows, Stony Brook.

IMPA *1/2015*
Conference on Hyperbolic Geometry and Minimal Surfaces, Rio de Janeiro, Brazil.

AMS Sectional Meeting *11/2014*
Special Session on Geometric Analysis, UNC Greensboro.

Princeton University *10/2013*
Geometric Analysis Seminar, Princeton, NJ, USA.

The Johns Hopkins University *010/2013*
Geometric Analysis Seminar, Baltimore, MD, 2013.

AMS Sectional Meeting *010/2013*
Special Session on Parabolic Evolution Equations of Geometric Type,
Philadelphia, PA, USA.

University of California, San Diego *07/2013*
CAARMS.

MIT *04/2012*
Graduate Student and Post-Doc Workshop on Minimal Surfaces
and 3-Manifold Topology, Cambridge, MA, USA.

University of Rochester *04/2013*
Colloquium, Rochester, NY, USA.

Lehigh University *05/2012*
Conference on Geometry and Topology, Bethlehem, PA, USA.

CUNY Graduate Center *03/2012*
Differential Geometry Seminar, Manhattan, NY, USA.

MIT, *04/2011*
Geometric Analysis Seminar, Cambridge, MA, USA.

Princeton University, *03/2011*
Graduate Student and Post-Doc Workshop on Low Dimensional Geometry
and Topology, Princeton, NJ, USA.

AMS Sectional Meeting, *10/2010*
Special Session on Geometric Analysis and Flows, Syracuse, NY, USA.

Prima Conference on Geometric Analysis, *07/2010*

Pacific Institute for the Mathematical Sciences, Vancouver, Canada.

University of Arkansas. *03/2010*
Spring Lecture Series 2010, Fayettville, AR, USA.

Johns Hopkins University, *03/2010*
Mean Curvature Flow and Related Topics, Baltimore, MD,USA.

Centro di Ricerca Matematica Ennio De Giorgi, *07/2009*
Workshop on Geometric Flows and Geometric Operators, Pisa, Italy.

Professional Service

Referree for: J. Geom Anal., Trans. Amer. Math. Soc, Proc. Amer. Math. Soc, Geometriae Dedicata., Pacific Journal of Mathematics, Journal of Differential Equations, Bulletin of the London Mathematical Society, American Journal of Math.
Organized: Co-organizer of the MIT Geometric Analysis seminar, 2010-2014, University of Rochester Geometry Seminar, 2015-present.
Member of the National Science Foundation Committee On Publication Ethics, 2016-present
Member of the Graduate Committee, 2017-present
Member of the Advisory Committee to the River Campus Libraries, 2017-present.