## Stephen J. Kleene


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| Contact Information | 8 Blackstone Blvd Unit 1<br>Providence, RI, 02906 | 585-738-4135<br>skleene@math.mit.edu |


**Research Interests** Minimal surfaces, mean curvature flow, geometric analysis, differential geometry.

**Employment**

**Brown University**, Providence, RI

Visiting Assistant Professor 2014-present

**Massachusetts Institute of Technology**, Cambridge, MA

CLE Moore Instructor, 2010-2014

**Education**

**The Johns Hopkins University**, Baltimore, MD

Ph.D., Mathematics, June 2010

- Thesis Topic: *Singular behavior of minimal surfaces*
- Advisor: William P. Minicozzi II, Ph.D

M.S., Mathematics, June 2007

**The University of Rochester**, Rochester, NY

B.A. (with highest distinction) Mathematics June 2005.

**Refereed Journal Publications**

1. C. Briener and S. J. Kleene, A minimal lamination of the interior of a positive cone with linear curvature blowup, to appear *J. Geom. Anal* (2014).
2. N. Kapouleas, S. J. Kleene and N. M. Moller, Mean curvature self-shrinkers of high genus: Non-compact examples *J. Reine Angew. Math.* (2012), to appear.
3. S. J. Kleene and N. M. Moller, Self-Shrinkers with a rotational symmetry, *Trans. Amer. Math. Soc.* (2012) , to appear.
4. S. J. Kleene, A minimal lamination with cantor set-like singularities, *Proc. Amer. Math.* Soc. vol. 140, no. 4 (2012) 1423-1436.
5. M. Calle, S. J. Kleene and J. Kramer, Width and flow of hyper surfaces by curvature functions, *Trans. Amer. Math. Soc.* vol. 363, no. 3 (2011) 1125-1135.

**Submitted Journal Publications**

1. G. Drugan and S. J. Kleene, Immersed self shrinkers.
2. C. Breiner and S. J. Kleene, Logarithmically spiraling helicoids.
3. N. Kapouleas, S. J. Kleene and N. M. Moeller, Non-compactness in moduli spaces of embedded finite topology minimal surfaces.

**Papers in Preparation**

1. N. Kapouleas, S. J. Kleene and N. M. Moller, Complete embedded self shrinkers near the cylinder.
2. C. Breiner and S. J. Kleene, Prescriblng blowup rate for minimal laminations of tubes.

## Awards and Grants

-2010-2014: NSF Postdoctoral Research Fellowship

## Invited Talks

- IMPA, Rio De Janeiro, Jan 2015
- AMS Sectional Meeting, UNC-Greensboro, Oct 2014
- Geometric Analysis Seminar, Princeton University, Oct 2013
- Geometric Analysis Seminar, The Johns Hopkins University Oct 2013
- AMS Sectional Meeting, Temple University Oct 2013
- CAARMS, UCSD Jul 2013
- Workshop on Minimal Surfaces, 3-Manifold Topology, MIT Apr 2013
- Department of mathematics colloquium, University of Rochester Apr 2013
- Lehigh Geometry/Topology Conference, Lehigh University May 2012
- Differential Geometry Seminar, CUNY Graduate Center Mar 2012
- Geometric Analysis Seminar, Massachusetts Institute of Technology Apr 2011
- Graduate and Postdoc Workshop, Princeton University Mar 2011
- AMS Sectional Meeting, Syracuse University Oct 2011
- PRIMA, Vancouver Jul 2010
- Minimal Surfaces Conference, University of Arkansas, Fayetteville Apr 2010
- Graduate and Postdoc Workshop, JHU Mar 2010
- Centro Di Giorgi, Pisa, Italy Jul 2009

## Teaching Experience

Instructor — Spring 2014
Math 52 - Linear Algerbra
Department of Mathematics,
Brown University

Instructor — Spring 2014
Math 54 - Linear Algerbra
Department of Mathematics,
Brown University

Instructor — Spring 2013
Math 18.04 - Complex Analysis with Applications
Department of Mathematics,
Massachusetts Institute of Technology

Instructor — Spring 2012
Math 18.950 - Differential Geometry
Department of Mathematics,
Massachusetts Institute of Technology

Recitation Leader — Spring 2011
Math 18.01A - Calculus
Department of Mathematics,
Massachusetts Institute of Technology

Recitation Leader — Fall 2010
Math 18.02 - Calculus
Department of Mathematics,
Massachusetts Institute of Technology

## Service

**Referree for**: *J. Geom Anal.*, *Trans. Amer. Math. Soc*, *Proc. Amer. Math. Soc*, *Geometriae Dedicata*.
**Organized**: Co-organizer of the MIT Geometric Analysis seminar, 2011-2014.

## References

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Massachusetts Institute of Technology

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Nikolaos Kapouleas
Professor — Phone: 401-863-7964
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