

Sunhi Choi

Department of Mathematics, The University of Arizona
617 N. Santa Rita Ave. P.O. Box 210089
Tucson, AZ 85721-0089 USA
E-mail: schoi@math.arizona.edu

E d u c a t i o n & A p p o i n t m e n t

Assistant Professor, U of Arizona, Mathematics Department	2006 - present
C.L.E. Moore Instructor, MIT, Mathematics Department	2003 - 2006
Postdoctoral Fellow, UCLA, Mathematics Department	Spring 2003
Ph.D in Mathematics, UCLA, Mathematics Department Research Area: Harmonic Analysis Advisor: John Garnett	Dec. 2002
B.A in Mathematics, Seoul National University, Mathematics Department	Feb. 1997

R e s e a r c h I n t e r e s t s

Partial differential equations, Harmonic analysis.

P u b l i c a t i o n s & P r e p r i n t s

- S. Choi, I. Kim *Regularity for the One-Phase Stefan problem from a Lipschitz initial surface*, preprint (submitted to Duke Math. J.)
- S. Choi, D. Jerison, I. Kim *A local regularization theorem on one-phase Hele-Shaw flow*, preprint (submitted to Math. Z.)
- S. Choi, D. Jerison, I. Kim *Locating the first nodal set in higher dimensions*, preprint (to appear in Trans. Amer. Math. Soc.)
- S. Choi, D. Jerison and I. Kim *Regularity for the One-Phase Hele-Shaw problem from a Lipschitz initial surface*, Amer. J. Math. 129 (2007), no. 2, 527-582
- S. Choi and I. Kim *Waiting time phenomena for the Hele-Shaw and the Stefan problem*, Indiana Univ. Math. J. 55 (2006) 525-552
- S. Choi *The lower density theorem for harmonic measure*, J. d'Analyse Math. 93 (2004), 237-270.

I n v i t e d T a l k s

On the lower density conjecture for harmonic measure,

- Analysis Seminar, UCLA, Fall 2002.
- Banff workshop - Analysis and Geometric Measure Theory, Summer 2003.

On the regularity for the free boundary problems,

- Analysis Seminar, UCLA, Spring 2004.
- Analysis Seminar, Brown university, Fall 2004.
- Analysis Seminar, U of Arizona, Spring 2005
- Analysis Seminar, Cornell, Spring 2005

On the first nodal set in convex domains,

- Analysis Seminar, Caltech, Spring, 2006

G r a n t

National Science Foundation, 2005 - 2008

-Partial differential equations and Harmonic analysis.

R e f e r e n c e s

David Jerison	Professor	Department of Mathematics, MIT	jerison@math.mit.edu
John Garnett	Professor	Department of Mathematics, UCLA	jbg@math.ucla.edu
Terence Tao	Professor	Department of Mathematics, UCLA	tao@math.ucla.edu