

Yao Yao

- CONTACT INFORMATION Department of Mathematics
UCLA, MS 6160 *Email:* yaoyao@math.ucla.edu
Los Angeles, CA 90095-1555, USA *Homepage:* www.math.ucla.edu/~yaoyao
- RESEARCH INTERESTS Nonlinear partial differential equations, free boundary problems.
- EDUCATION **2007-now: University of California, Los Angeles**, California USA
- Ph.D. Candidate, Mathematics, (expected graduation date: June 2012).
Advisor: Professor Inwon C. Kim
 - M.A., Mathematics, June 2008.
- 2003-2007: Peking University**, Beijing, China
- B.S., Mathematics, July 2007.
- PUBLICATIONS I. C. Kim and Y. Yao, The Patlak-Keller-Segel model and its variations: properties of solutions via maximum principle, *arXiv:1102.0092*, to appear in *SIAM J. Math. Anal.*
- L. Chayes, I. C. Kim and Y. Yao, An aggregation equation with degenerate diffusion in periodic domain: qualitative property of solutions, preprint, available upon request.
- A. L. Bertozzi and Y. Yao, Blow-up profile for the aggregation equation with degenerate diffusion, in preparation.
- Y. Yao, Asymptotic behavior of radial solutions for critical Patlak-Keller-Segel model and an repulsive-attractive aggregation equation, in preparation.
- TALKS “A degenerate diffusion with nonlocal drift: behavior of radial solutions”
AMS Sectional Meeting, Los Angeles, CA, October 2010.
- HONORS AND AWARDS
- Horn-Moez Prize for Excellence in First Year Graduate Studies, UCLA, 2008
 - Full financial support awarded by UCLA Graduate Division, 2007–2011
 - President’s Undergraduate Research Funds of Peking University, 2005-2006
 - Outstanding Student of Peking University, 2005
- TEACHING EXPERIENCE **UCLA Math Boot Camp 2011**, Los Angeles, CA USA
Workshop Instructor *Summer 2011*
- Responsible for developing and running weekly workshops with the intent of preparing students for the GRE math subject exam.
 - Developed worksheets for all subject areas covered in exam.

UCLA Department of Mathematics, Los Angeles, CA USA

Teaching Assistant

- Math 266B (Graduate): Applied Partial Differential Equations, Winter 2010
- Math 266A (Graduate): Applied Ordinary Differential Equations, Fall 2009
- Math 171: Stochastic Processes, Spring 2009-2011
- Math 142: Mathematical Modelling, Spring 2008 and Fall 2011
- Math 31B: Integration and Infinite Series, Winter 2008 and Winter 2011

CONFERENCES
ATTENDED

- Free Boundary Problems, Theory and Applications, Berkeley, March 2011
- Southern California Analysis and PDE conference, UCLA, November 2010
- AMS sectional meeting, UCLA, October 2010
- The Thirteenth Rivière-Fabes Symposium on Analysis and PDE, University of Minnesota, April 2010
- Analysis of nonlinear PDEs and free boundary problems: Applications to homogenization, Vancouver, July 2009