

# Curriculum Vitæ

Yanni Zeng

## Professional Experience

Professor, University of Alabama at Birmingham, 2017 – present.

Associate Professor, University of Alabama at Birmingham, 2001 – 2017.

Assistant Professor, University of Alabama at Birmingham, 1997 – 2001.

National Science Foundation International Research Fellow, RWTH, Aachen, Germany, Summer, 1998.

Postdoctoral Research Associate, State University of New York at Stony Brook, 1994 – 1997.

Visiting Assistant Professor, Brown University, 1992 – 1994.

## Educational Background

Ph. D. 1992 Courant Institute of Mathematical Sciences, New York University (Mathematics).

M. S. 1984 Zhongshan University, Guangzhou, China (Computer Science).

B. S. 1982 Zhongshan University, Guangzhou, China (Computer Science).

## Grants and Awards

- 2019–22 Hyperbolic-Parabolic Balance Laws With Applications;  
National Science Foundation – standard research grant DMS-1908195
- 2012–17 Nonlinear PDEs and Applications in Continuum Mechanics;  
Simons Foundation – Collaboration Grants for Mathematicians #244905;  
no cost extension 2017 – 2018.
- 2007–08 Nonlinear Stability of Viscous Shock Waves;  
UAB Advance Faculty Award, sponsored by National Science Foundation.
- 2002–05 Conservation Laws with Partial Dissipation in Continuum Mechanics;  
National Science Foundation – standard research grant DMS-0207154;  
no cost extension 2005 – 2006.
- 1999–02 Conservation Laws with Partial Dissipation in Continuum Mechanics;  
National Science Foundation – standard research grant DMS-9972031.
- 2001–02 UAB 2002 International Conference on Diff. Equations and Math. Physics;  
National Science Foundation – conference grant; Co-PI (PI: Rudi Weikard;  
other Co-PIs: Ioulia Karpechina, Günter Stolz); DMS-0120195.
- 2000–03 Scientific Computing Research Environments for the Mathematical Sciences;  
National Science Foundation – SCREMS; Co-PI (PI: Ian Knowles; other Co-PIs: David Halpern, Ryoichi Kawai, Richard McNider); DMS-0079478.
- 1999–00 Hyperbolic Systems w. Relaxation and Application in Physical Gas Dynamics;  
University of Alabama at Birmingham – Faculty Development Program.
- 1999 Travel grant for ICIAM99, Edinburgh, Scotland;  
Association for Women in Mathematics.
- 1998–99 Nonlinear Stability of Viscous Shock Waves;  
Oak Ridge Associated Universities – Ralph E. Powe Junior Faculty Enhancement Award.
- 1997–98 Large Time Behavior of Solutions to Nonlinear Hyperbolic-Parabolic Systems of Conservation Laws with Non-strict Hyperbolicity;  
National Science Foundation – International Research Fellowship INT-9704618.
- 1996 Travel Grant for Oberwolfach Conference, Germany;  
Association for Women in Mathematics – National Science Foundation.
- 1993–95 Asymptotic Behavior of Solutions to Nonlinear Viscoelasticity with Fading Memory;  
National Science Foundation – Research Planning DMS-9307928.

## Plenary Conference Talks (50 minutes):

- International Conference on Nonlinear Analysis: Kinetic Theory and Related Topics, Taipei, Taiwan, October 30 - November 3, 2015
- The Thirteenth International Conference on Hyperbolic Problems: Theory, Numerics, Applications, Beijing, China, June 15-19, 2010

## Selected Invited Conference Talks:

- First Annual Texas-Louisiana SIAM Sectional Meeting, Mini-symposium on Nonlinear Conservation Laws and Applications, Louisiana State University, Oct 5-7, 2018
- Thirtieth Meeting of the Joint Ph.D. Program in Applied Mathematics, University of Alabama at Birmingham, November 4, 2017
- 1117th AMS Meeting, Special Session on PDE Analysis in Fluid Flows, University of Georgia, March 5-6, 2016
- Workshop on Hyperbolic Conservation Laws and Related Topics (In Honor of Prof. Tai-Ping Liu's 70th Birthday), Seoul National University, June 22-25, 2015
- The 8th International Conference on Nonlinear PDEs & Their Numerical Analysis, Hangzhou, China, May 25-28, 2015
- SIAM SEAS 2015, Special Session on Nonlinear PDEs of Conservation Laws and Fluid Mechanics, UAB, March 20-22, 2015
- Workshop on Kinetic Theory and Gas Dynamics, Stanford University, July 8 - 28, 2012
- Joint Mathematics Meetings, AMS-AWM Special Session on Nonlinear Hyperbolic Partial Differential Equations, Boston, MA, January 4-7, 2012
- AMS meeting, Special Session on Nonlinear Analysis of Partial Differential Equations, Georgia Southern University, March 12-13, 2011
- A three-hour lecture in FRG Meeting and Workshop on Kinetic Theory and Conservation Laws, Stanford University, June 26 - July 9, 2007
- General Relativity and Shock Wave Theory, a Conference in Honor of Joel Smoller on His 70th Birthday, Stanford University, April 2006
- International Conference on Conservation Laws and Kinetic Theory, Shanghai Jiao Tong University, China, July 2005
- Conference on Analysis, Modeling, and Computation of PDE and Multiphase Flow – in Celebration of the 70th Birthday for Prof. James Glimm, Stony Brook, NY, August 2004
- International Symposium on Nonlinear Evolutionary Equations, Sichuan, China, July 6-14, 2002
- Workshop on Conservation Laws, Stanford University, July 2001
- International Conference on Nonlinear Evolutionary Partial Differential Equations, Yellow Mountain, China, June 10-15, 2001
- AMS meeting, Special Session on Nonlinear Partial Differential equations and Applications, UAB, November 10-12, 2000
- Workshop on Conservation Laws, Stanford University, August, 1999
- International Conference on Applied Partial Differential Equations, Shanghai, China, July 13-16, 1999
- The Fourth International Congress of Industrial and Applied Mathematics, Minisymposium for Women Postdoctoral Mathematicians, Edinburgh, Scotland, July 5-9, 1999
- ANumE - SPARCH Workshop on Time-Dependent Magnetohydrodynamics: Analytical, Numerical, and Application Aspects, Kirchzarten, Germany, July 20-22, 1998
- Tenth Meeting of the Joint Ph.D. Program in Applied Mathematics, University of Alabama at Huntsville, November, 1997
- The Sixth International Conference on Hyperbolic Problems: Theory, Numerics, Applications, Hong Kong, June 1996

- Conference on Hyperbolic Systems of Conservation Laws, Oberwolfach, Germany, April 28 - May 4, 1996

**Invited Talks in Colloquia/Seminars:** Academy of Mathematics and Systems of Science, Chinese Academy of Sciences, Beijing, China; Brown University; Capital Normal University, Beijing, China; Carnegie Mellon University; Chinese University of Hong Kong, China; Clarkson University; CUNY at Staten Island; Duke University; Florida International University; Fudan University, Shanghai, China; Georgia Institute of Technology; Indiana University (Bloomington); Indiana University-Purdue University (Indianapolis); Institut für Mathematik, RWTH-Aachen, Germany; Institute of Mathematics, Academia Sinica, Taipei, Taiwan; Istituto Per Le Applicazioni Del Calcolo “M. Picone”, Rome, Italy; Iowa State University; Kennesaw State University; Northwestern University; Purdue University; Rensselaer Polytechnic Institute; Shanghai Jiao Tong University, Shanghai, China; SUNY at Stony Brook; Sun Yat-sen University, Guangzhou, China; Temple University; Tokyo Institute of Technology; University of Alabama at Huntsville; University of Delaware; University of L’Aquila, Italy; University of Maryland (College Park); University of Massachusetts (Amherst); Western Michigan University; Wuhan University, Wuhan, China.

### **Postdoctoral Research Projects Supervised**

Jiao Chen, Shanghai Jiao Tong University, China, 2014-2015

### **Student Research Projects Supervised**

- Ph.D. Students: Jean Rugamba 2017-, Alzaki Fadl Allah 2014; Jiao Chen (exchange student from Shanghai Jiao Tong University, China), 2012
- Undergraduate Students: Alyssa Wilke (Spring 2018); Kenneth Davis (Fall 2016-Summer 2018), Elizabeth Liddle (Fall 2014), Lauren Douglas (Spring 2014 and Fall 2013), Jordan Walton (Spring 2013 and Fall 2012), Catherine Essex (Fall 2011), Zan Li (Spring 2010 and Fall 2009), Lauren Langford (Fall 2008), Kelli Perry (Spring 2008, Fall 2007, Summer 2007, Spring 2007, Fall 2006, Summer 2006, Spring 2006 and Fall 2005), Arielle Sullivan (Fall 2004), Melody Jackson (Summer 2004, ALSAMP Summer Internship), Malisa Girard (Spring 2004 and Fall 2003), Roger Nichols (Spring 2003), Ashleigh Harper (Fall 2002), Naomi Anderegg (Fall 2001), Nora Wang (Summer 2001, Spring 2001, Winter 2000 and Fall 2000), Tamarrah Davis (Summer 2000), Anthony Morrison (Spring 2000 and Winter 2000), Jamie Cason (Fall 1999 and Summer 1999), Ellis Owusu (Spring 1999)

### **Conferences Organized**

- Co-organizer (with Kun Zhao) of the mini-symposium “Nonlinear Conservation Laws and Applications” in the First Annual Texas-Louisiana SIAM Sectional Meeting, held at LSU on Oct. 5-7, 2018
- Co-Chair (with Carmeliza Navasca) of the 39th SIAM Southeastern Atlantic Section Conference held at UAB on March 20-22, 2015
- Co-organizer (with Robin Young and Tao Luo) of the special session “Nonlinear PDEs of Conservation Laws and Fluid Mechanics” in SIAM SEAS 2015 held at UAB, Mar. 20-22, 2015
- Co-organizer (with Yulia Karpeshina, Günter Stolz, and Rudi Weikard) of the Ninth UAB International Conference on Differential Equations and Mathematical Physics held at UAB, March 26-30, 2002
- Co-organizer (with Dehua Wang) of the special session “Nonlinear Partial Differential Equations and Applications” at the regional meeting of the American Mathematical Society held at UAB, Nov. 10-12, 2000