

# Qiang Shi

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## EDUCATION

- Sept. 2001 – Jul. 2006     **Doctor of Philosophy in Mathematics**  
University of Missouri-Columbia, Columbia, Missouri
- Sept. 1998 – Jul. 2001     **Master of Science in Computational Mathematics**  
Xi'an Jiaotong University, Xi'an, China
- Sept. 1994 – Jul. 1998     **Bachelor of Science in Computing Mathematics and Applied Software**  
Xi'an Jiaotong University, Xi'an, China

## ACADEMIC APPOINTMENTS

1. Assistant Professor in Mathematics, Emporia State University, starting from August, 2007
2. Mathematics Instructor, Emporia State University, August 2006-May 2007

## HONORS AND AWARDS

1. Mathematics Department's 2005-2006 Distinguished Teaching Awards, University of Missouri-Columbia
2. Graduate Teaching Assistantship, University of Missouri-Columbia, 2002-2006
3. Graduate Fellowship, University of Missouri-Columbia, 2001-2002
4. Exemption in National Entrance Examination for Graduate School, Xi'an Jiaotong University, Xi'an, China, 1998

## TEACHING EXPERIENCE

1. Fall 2007, Calculus I, Calculus Honors, Precalculus, Introduction to Mathematics and College Algebra, Emporia State University
2. Spring 2007, Differential Equations, Basic Calculus, and College Algebra, Emporia State University
3. Fall 2006, Mathematical Modeling, Basic Calculus, and College Algebra, Emporia State University
4. Fall 2004-Winter 2006, Graduate Instructor for College Algebra, University of Missouri-Columbia
5. Summer 2006, Graduate Instructor for Analytic Geometry & Calculus I, University of Missouri-Columbia
6. Fall 2003-Winter 2004, Teaching Assistant for Calculus I and II, University of Missouri-Columbia
7. Fall 2000, Teaching Assistant for Calculus I, Xi'an Jiaotong University, Xi'an, China

## PROFESSIONAL DEVELOPMENT

1. 2007-2008 MAA Project NExT (New Experience in Teaching) Fellow
2. MAA PREP Workshop: Wavelets and Applications, University of St. Thomas, St. Paul, MN, June 6-9, 2007

## PUBLICATIONS

1. D. Mitrea, M. Mitrea and Q. Shi, *Variable coefficient transmission problems and singular integral operators on non-smooth manifolds*, No.1-3, Vol.18 (2006), Journal of Integral Equations and Applications

### **TALKS AND PRESENTATIONS**

1. 50-minute expository talk: *A Clifford algebra approach to scattering problems*, Emporia State University, January 26, 2007
2. 20-minute presentation: *Clifford algebras and transmission boundary value problems for Dirac type operators across Lipschitz interface*, AMS Sectional Meeting, University of Arkansas-Fayetteville, November 4, 2006

### **CONFERENCES AND SEMINARS ATTENDED**

1. Prairie Analysis Seminar, Kansas State University, November 3, 2007
2. UMKC Expository Talks Series, November 2, 2007
3. The 17th Annual Kansas City Regional Mathematics Technology Expo, October 6, 2007
4. 2007 Mathfest, San Jose, California, August 3-5, 2007
5. 2007 MAA Kansas Sectional Meeting, Wichita State University, Kansas, March 30-31, 2007
6. 2007 Joint Mathematics Meetings, New Orleans, Louisiana, January 5-7, 2007
7. The 16th Annual Kansas City Regional Mathematics Technology Expo, September 30, 2006
8. NSF FRG Conference, University of Missouri-Columbia, March 24-26, 2006
9. The 8th International Internet Seminar on Evolution Equations, Phase 1, academic year 2004-2005
10. The 53rd Midwest PDE Conference, University of Missouri-Columbia, March 19-21, 2004

### **DEPARTMENT SERVICE**

1. Recruiting Committee, Emporia State University, academic year 2007-2008
2. Graduate Committee, Emporia State University, academic year 2007-2008
3. Undergraduate Committee, Emporia State University, academic year 2006-2007

### **ADVISEES**

1. Yang Song, B.S. in Mathematics

### **RESEARCH INTERESTS**

1. Harmonic Analysis: Calderon-Zygmund Theory, Smoothness Spaces
2. Partial Differential Equations: Boundary Integral Methods, Smoothness/Regularity of Solutions
3. Clifford Analysis: Dirac Operators, Cauchy-type Operators

### **THESES**

1. Doctoral Thesis: *Sharp Estimates of Transmission Boundary Value Problem for Dirac Operators in Non-smooth Domains*  
Advisor: Professor Marius Mitrea
2. Master Thesis: *Least-Squares Method for Navier-Stokes Equations on Two-Dimensional Manifolds*  
Advisor: Professor Kaitai Li

### **TEACHING-RELATED ACTIVITIES**

1. 2007 Math Day, Algebra Team, Emporia State University
2. Help Dr. Hollenbeck coach students for Putnam Competition
3. Volunteer of 2006 Expanding Your Horizons in Science and Mathematics conference, Emporia State University
4. 2006 Math Day, Algebra Team, Emporia State University
5. Mathematics Department's TA Workshop, Summer 2004, University of Missouri-Columbia
6. College Teaching Institute, August 14-16, 2002, University of Missouri-Columbia
7. Intensive English Program, June 10-August 1, 2002, University of Missouri-Columbia

8. Topics in Educational Leadership and Policy Analysis, Fall 2002, University of Missouri-Columbia
9. Oral Communication, Winter 2002, University of Missouri-Columbia

#### **TEACHING-RELATED SKILLS**

1. Online Course Systems: MyMathLab, Thinkwell
2. Graphing Calculators: TI Series, Casio 9750/9850
3. Mathematics Software: Mathematica, Maple, and Latex

#### **AFFILIATIONS**

1. American Mathematical Society
2. Mathematical Association of America