Ran Cui

Contact

Department of Mathematics,

(301)919-7542

INFORMATION University of Maryland,

cuiran@math.umd.edu

4176 Campus Drive,

http://www.math.umd.edu/~cuiran

College Park, MD 20742 USA

CITIZENSHIP

P.R.China

RESEARCH INTERESTS Representation Theory, specifically the Real-Quaternionic indicator of self-conjugate representations of real Lie groups, the Frobenius-Schur indicator of representations of real Lie groups and of p-adic groups, p-adic Langlands program, atlas of Lie groups project.

EDUCATION

University of Maryland

Ph.D., Mathematics (expected May 2016)

Thesis: The Real-Quaternionic Indicator

Advisor: Jeffrey Adams M.A., Mathematics, May 2012

Nankai University

B.S., Mathematics May 2009

Papers and Publications R. Cui, The Real-Quaternionic Indicator for Finite Dimensional Self-Conjugate Representations of Semi-Simple Lie Groups (pdf on website)

R. Cui, Explicit Construction of the Local Langlands Correspondence of GL_2 (pdf on website)

SELECTED TALKS The Real-Quaternionic Indicator, (Oct. 2015). Lie Groups and Representation Theory Seminar.

The Frobenius-Schur Indicator, (Feb. 2015). Student Algebra and Number Theory Seminar.

 $Strong\ Real\ Forms\ and\ Kac\ Classification,$ (Nov. 2014). Student Algebra and Number Theory Seminar.

Hermitian forms on (\mathfrak{g}, K) modules, (May 2014). Representation Theory Reading Group.

Explicit Construction of the Local Langlands Correspondence of GL_2 , (Nov. 2013) Lie Groups and Representation Theory Seminar.

TEACHING EXPERIENCE

	Women in Math Mentor/Mentee Program Introduction to Statistics (Stat 100) Calculus I (Math 140) Calculus I - Freshmen Connection (Math 140) Calculus II (Math 141) Differential Equations (Math 246) Applied Probability and Statistics (Stat 400) Calculus III (Math 241) Elementary Mathematical Models (Math 100)		mentor TA TA Lecturer TA TA Lecturer TA Lecturer	Sp 2013 Fa 2015 Fa 2014 Fa 2014 Fa 2013 Sp 2013, Sp 2011 Sp 2012, Fa 2011 Fa 2010 Sp 2010 Fa 2009	
RECENT AWARDS	2015 Ralph Pass III Fellowship Award				
SERVICES		Sp 2015 - present Vice president of Women in Math, University of Maryland Committee member of International Graduate Student in Math, UMD			
Conferences & Workshops	OCT. 2009 JUNE 2012 OCT. 2012 MAY 2013	in honor of Gregg Zuckerman's 6 FRG 2012 Workshop & Conferen JHU-UMD Algebra Number The Representation Theory, Automor and Complex Geometry	ex Geometry e in honor of the 70th birthday of Wilfried Schmid		
	May 2013 July 2013 Nov. 2013 Apr. 2014 May 2014	JHU-UMD Algebra Number Theory Day at JHU Workshop & Conference on Unitary Representations of Real Reductive Groups at University of Utah JHU-UMD Algebra Number Theory Day at UMD JHU-UMD Algebra Number Theory Day at JHU Representations of reductive groups A conference dedicated to David Vogan on his 60th birthday			
	Nov. 2014 Mar. 2015 June 2015 Nov. 2015	at MIT JHU-UMD Algebra Number Theory Day at UMD JHU-UMD Algebra Number Theory Day at JHU Representation Theory, Number Theory and Invariant Theory Conference in honor of Roger Howe's 70th birthday at MIT AMS Special Session meeting at Rutgers University			