

CURRICULUM VITAE

Chris Jantzen

CONTACT: Department of Mathematics
East Carolina University
Greenville, NC 27858

jantzen@ecu.edu
(252)328-1897 (Office)

EDUCATION: **University of Chicago**
Ph.D., Mathematics, August 1990.
Advisor: Paul Sally
M.S., Mathematics, August 1985.
University of Wisconsin - Madison
B.S., Mathematics, May 1984

EXPERIENCE: **Lecturer in Mathematics**
University of Chicago, 1986-1990
Visiting Assistant Professor
Duke University, August, 1990-May, 1991
Post-Doctoral Fellow
University of Toronto August, 1991-December, 1992
Visiting Post-Doctoral Associate
University of Chicago, January, 1993–August 1998
Visitor
SFB 170, Göttingen, June–July, 1993
Visitor
Purdue University, February–April, 1996
Visiting Assistant Professor
Ohio State University, September 1998–August 2000
Assistant Professor
East Carolina University, August 2000–August 2006
Associate Professor
East Carolina University, August 2006–August 2009
Professor
East Carolina University, August 2009–present

PUBLICATIONS:

1. Degenerate principal series for symplectic groups, *Mem. Amer. Math. Soc.*, **488**(1993), 1-111.
2. Degenerate principal series for orthogonal groups, *J. reine angew. Math.*, **441**(1993), 61-98.
3. On the Iwahori-Matsumoto involution and applications, *Ann. Sci. École Norm. Sup.*, **28**(1995), 527-547.
4. Degenerate principal series for symplectic and odd-orthogonal groups, *Mem. Amer. Math. Soc.*, **590**(1996), 1-100.
5. Reducibility of certain representations for symplectic and odd-orthogonal groups, *Compositio Math.*, **104**(1996), 55-63.
6. On supports of induced representations for symplectic and odd-orthogonal groups, *Amer. J. Math.*, **119**(1997), 1213-1262.
7. Some remarks on degenerate principal series, *Pacific J. Math.*, **186**(1998), 67-87.
8. Square-integrable representations for symplectic and odd-orthogonal groups, *Canad. J. Math.*, **52**(2000), 539-581.
9. Square-integrable representations for symplectic and odd-orthogonal groups II, *Represent. Theory*, **4**(2000), 127-180.
10. (joint with Henry Kim), Parameterization of the image of normalized intertwining operators, *Pacific J. Math.*, **199**(2001), 367-415.
11. (joint with Dubravka Ban), The Langlands classification for non-connected p -adic groups, *Israel J. Math.*, **126**(2001), 239-261.
12. (joint with Dubravka Ban), The Langlands classification for non-connected p -adic groups II: Multiplicity one, *Proc. Amer. Math. Soc.*, **131**(2003), 3297-3304.
13. (joint with Dubravka Ban), Degenerate principal series for even orthogonal groups, *Represent. Theory*, **7**(2003), 440-480.
14. (joint with Dubravka Ban), Duality and the normalization of standard intertwining operators, *Manuscripta Math.*, **115**(2004), 401-415.
15. Duality and supports of induced representations for orthogonal groups, *Canad. J. Math.*, **57**(2005), 159-179.
16. Jacquet modules of induced representations for p -adic special orthogonal groups, *J. Algebra*, **305**(2006), 802-819.
17. Representations of p -adic general linear groups, *Represent. Theory*, **11**(2007), 45-83.

18. (joint with Dubravka Ban), On R-groups in the nontempered case, *Int. Math Res. Not.*, **2007**, article ID: rmn059, 29 pages, doi:10.1093/imrn/rmn059.
19. (joint with Dubravka Ban), Jacquet modules and the Langlands classification, *Michigan Math. J.*, **56**(2008), 637-653.
20. (joint with Seungil Choi), Degenerate principal series for exceptional p -adic groups of type F_4 , *J. Lie Theory*, **20**(2010), 785-806.
21. Discrete series for p -adic $SO(2n, F)$ and restrictions of representations of $O(2n, F)$, *Canad. J. Math.*, **63**(2011), 327-380.
22. (joint with Marcela Hanzer), A method of proving nonunitarity of representations of p -adic groups II, *J. Lie Theory*, **22**(2012), 1109-1124.
23. (joint with Dubravka Ban), The Langlands quotient theorem for finite central extensions of p -adic groups, *Glasnik Mat.*, **48**(2013), 313-334.
24. Tempered representations for classical p -adic groups, *Manuscripta Math.*, **145**(2014), 319-387.
25. (joint with Baiying Liu), The generic dual of p -adic split SO_{2n} and local Langlands parameters, *Israel J. Math.*, **204**(2014), 199-260.
26. (joint with Dubravka Ban), The Langlands quotient theorem for finite central extensions of p -adic groups II: Intertwining operators and duality, *Glasnik Mat.*, **51**(2016), 153-163.
27. Induced representations and Jacquet modules for classical p -adic groups, *Manuscripta Math.*, **156**(2018), 23-55.
28. Duality for classical p -adic groups: the half-integral case, *Represent. Theory*, **22**(2018), 160-201.
29. (joint with Caihua Luo) On supports of induced representations for general spin and even special orthogonal groups, *J. Algebra*, **595**(2022), 551-580.
30. (joint with Baiying Liu) The generic dual of p -adic groups and local Langlands parameters, preprint.

FUNDING:

National Security Agency grant H98230-13-1-0237, 2/2013-2/2015 (no-cost extension through 8/2015)

National Security Agency grant H98230-10-1-0162, 1/2010-1/2012 (no-cost extension through 9/2012)

National Security Agency grant H98230-04-1-0029, 3/2004-3/2006.

ECU Harriot College of Arts and Sciences Summer Research Award 5/2019-6/2019.

ECU Research and Creative Activity Award, 5/2004-6/2004 (funded through Harriot College of Arts and Sciences), 5/2006-6/2006.

ECU College Research Award, 1/2003-5/2003 and 1/2008-5/2008.

INVITED LECTURES (SINCE 1998):

The Quest for Hidden Simplicity of Noncommutative Harmonic Analysis and Representation Theory; A Conference Celebrating the 70th birthday of Marko Tadić, (Zagreb, 6/24)

The 2020 Paul J. Sally, Jr. Midwest Representation Theory Conference (Virtual, 10/20)

Representations of p -adic Groups; A Conference Dedicated to Marko Tadić on his 60th Birthday, (Zagreb, 6/14)

AMS Sectional Meeting, Special Session on Automorphic Forms and Representation Theory, (St. Louis, 10/13)

Representation Theory of Reductive Groups—Local and Global Aspects, (Vienna, 2/09)

AMS Sectional Meeting, Special Session on the Representation Theory of Reductive Groups (Evanston, 10/04)

AMS Sectional Meeting, Special Session on Lie Groups and Their Representations (Madison, 10/02)

Workshop on Representations of Reductive p -adic Groups (Banff, 2/02)

Workshop on Lie Groups, Lie Algebras, and Their Representations (Salt Lake City, 11/99)

Workshop on Representations of Reductive p -adic Groups (Montreal, 5/99)

Also: The Chinese University of Hong Kong, Shenzhen (3/23-virtual), Southern Illinois University (3/12 and 1/11), University of Toronto (3/01) University of Michigan (3/00), MIT (3/00), University of Minnesota (12/99), University of Oklahoma (3/99), Ohio State University (2/99), Ball State University (10/98).

PAPERS REFEREED: (alphabetical by journal)

Acta Mathematica x1

American Journal of Mathematics x2

Bulletin de la Société Mathématique de France x1

Bulletin of the Kerala Mathematical Association x1

Canadian Journal of Mathematics x4

Clay Mathematical Proceedings (conference proceedings) x1

Compositio Mathematica x1

Duke Mathematical Journal x1
Glasnik Matematički x3
International Mathematics Research Notices x3
Israel Journal of Mathematics x2
Journal of Algebra x6
Journal of the Ramanujan Mathematical Society x1
Manuscripta Mathematica x3
Mathematical Communications x1
Monatshefte für Mathematik x1
Nagoya Mathematical Journal x1
Pacific Journal of Mathematics x3
Proceedings of the American Mathematical Society x1
Progress in Mathematics (conference proceedings) x1
Representation Theory x3
Transactions of the American Mathematical Society x3

MAJOR DEPARTMENTAL SERVICE: (committee chair or administrative role)

- Chair (2022-present)
- Interim Chair (2020-2022)
- Graduate Director (2011-19)
- Chair, Personnel Committee (2009-11)
- Chair, Departmental Awards (Scholarship) Committee (2007-2010)
- Chair, Undergraduate Committee (2003-2005)

COURSES TAUGHT AT ECU:

Math 0001 Intermediate Algebra-A
 Math 1050 Explorations in Mathematics
 Math 1064 Applied Mathematics for Business
 Math 1065 College Algebra
 Math 1066 Applied Mathematics for Decision Making
 Math 2119 Elements of Calculus
 Math 2121 Calculus for the Life Sciences I
 Math 2122 Calculus for the Life Sciences II
 Math 2151 Engineering Calculus I
 Math 2152 Engineering Calculus II
 Math 2153 Engineering Calculus III
 Math 2154 Engineering Linear Algebra and Differential Equations
 Math 2171 Calculus I
 Math 2172 Calculus II
 Math 2173 Calculus III

Math 3256 Linear Algebra
Math 3263 Introduction to Abstract Algebra
Math 3584 Computational Linear Algebra
Math 4101/5101 Advanced Calculus I
Math 4110 Elementary Complex Variables
Math 4331 Introduction to Ordinary Differential Equations
Math 5021 Theory of Numbers I
Math 5102 Advanced Calculus II
Math 5131 Deterministic Methods in Operations Research
Math 5521 Readings and Lectures in Mathematics*
Math 5551 The Historical Development of Mathematics
Math 6001 Matrix Algebra*
Math 6011 Modern Algebra I
Math 6011 Modern Algebra II*
Math 6022 Theory of Numbers II*
Math 6111 Introduction to Complex Variables I
Math 6121 Real Variables I
Math 6500 Special Topics: Algebraic Topology*
Math 6651 Introduction to Topology
Math 7000 Thesis*

* denotes courses taught only in directed readings format.