

Keith R. Ouellette

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Employment

PIC Assistant Adjunct Professor
UCLA Mathematics Department

July 2006-Present

Education

Ph.D., Mathematics, UCLA, June 2006

Dissertation: On the Fourier Inversion Theorem for Reductive Adèlic Groups

Advisor: Jonathan Rogawski

M.A., Mathematics, UCLA, January 2001

B.A., Mathematics, College of the Holy Cross, May 1999

Concentration, Computer Science, College of the Holy Cross, May 1999

Honors and Awards

United States Achievement Academy National Collegiate Mathematics Award, 2004

Phi Beta Kappa, 1999

Magna Cum Laude, 1999

Pi Mu Epsilon, Massachusetts Beta Chapter, 1999

Research Interests

Automorphic Forms, Eisenstein Series, Representation Theory, Number Theory

Research Articles

On the Fourier inversion formula for reductive adèlic groups

In preparation.

On the Fourier inversion formula for reductive p-adic groups

In preparation.

Managing multiple medical image files and formats and conventions

(with S.C. Neu, D.J. Valentino, and A.W. Toga),

Proceedings of the SPIE, vol 5033, pp. 330-338 (2003).

Teaching Experience

I. Undergraduate Courses Taught, UCLA

MATH 31A Differentiable and Integral Calculus
MATH 31B Integration and Infinite Series
MATH 110A Algebra
MATH 117 Algebra for Applications
MATH 131A Real Analysis
PIC 10A Introduction to Programming C++
PIC 20A Principles of Java Programming
PIC 40A Introduction to Internet Programming

II. Graduate Courses Taught, UCLA

MATH 290B Graduate Seminar in Number Theory (Winter 2007)
MATH 290B Graduate Seminar in Number Theory (Spring 2007)

III. Teaching Assistant, UCLA

MATH 3C Calculus and Probability for the Life Sciences
MATH 32A Calculus of Several Variables
MATH 113 Combinatorics
MATH 115A Linear Algebra
MATH 120A Differential Geometry
MATH 132 Complex Analysis for Applications
PIC 10A Introduction to Programming C++
PIC 10B Intermediate Programming C++
PIC 10C Advanced Programming C++
PIC 20A Principles of Java Programming
PIC 20B Advanced Aspects of the Java Language with Applications
PIC 40A Introduction to Internet Programming

Mentoring

PIC 89HC Honors Contract (Spring 2009)
Advised two undergraduate students towards developing their own Java and Web applications which create, display, edit, save, and retrieve a person's "train of thought" as a tree.

Presentations

- 03/2008. On the Fourier inversion formula for reductive groups
22nd Annual Workshop on Automorphic Forms and Related Topics
Texas A&M University, College Station, TX.
- 01/2006. The Fourier inversion formula for the continuous spectrum of $L^2(G(F)\backslash G(A))$
AMS-MAA Joint Mathematics Meetings
San Antonio, TX.

- 12/2005. A new proof of the Fourier inversion formula for $SL(2, \mathbb{Z}) \backslash \mathbb{H}$
West Coast Number Theory Conference
Pacific Grove, CA.
- 12/2005. A new proof of the Plancherel formula in the adèlic setting
UCLA Number Theory Seminar
Los Angeles, CA.
- 08/2005. The Fourier inversion formula for the continuous spectrum of $L^2(\Gamma \backslash G / K)$
Dartmouth College Number Theory Seminar
Hanover, NH.

Skills

Mathematical Software: LaTeX, Maple

Programming Languages: C++, Java, XML, XHTML, JavaScript, Perl, PHP

Professional Affiliations

UCLA Number Theory Group

American Mathematical Society

American Mathematical Association

References

Jonathan Rogawski, Professor

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Don Blasius, Professor

blasius@math.ucla.edu

Robert Brown, Professor

rfb@math.ucla.edu

Chris Anderson, Professor, PIC Director

anderson@math.ucla.edu