

# Curriculum Vitae

## H. Timothy Choi

### Office Address:

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### Home Address:

Available upon request

### RESEARCH INTERESTS:

**General:** Number Theory

**Specific:** zeta functions,  $L$ -functions, exponential sums (Kloosterman sums),  $p$ -adic methods

### EDUCATION:

Sept. 2002 to present    **Ph.D. in Mathematics** (in progress)  
University of California, Irvine (UCI)  
Advisor: Professor Daqing Wan

Aug. 1999 to May 2002    **B.A. in Mathematics**  
University of California, San Diego  
Thesis Topic: Sums of powers of Kloosterman sums  
Advisor: Professor Ronald Evans  
Honors: cum laude, honors program

### SELECTED AWARDS and HONORS:

- Outstanding Mathematics Teaching Assistant Award for maintaining an excellent record of teaching (2008)
- Connelly Award for maintaining an excellent record of teaching and research (2007)
- Outstanding Contributions to the [Mathematics] Department Award (2006)

### PUBLICATIONS and PREPRINTS:

H. T. Choi and R. Evans, Congruences for sums of powers of Kloosterman sums, *Int. J. Number Theory*, Vol. 3, No. 1 (2007) 105-117.

T. Choi and Z. Lu, On the DDVV conjecture and the Comass in calibrated geometry (I), *Mathematische Zeitschrift*, accepted.

## CONFERENCES ATTENDED

- Western Number Theory Conference (2000, USD)
- Mt. Baldy Conference on Applied Algebra and Combinatorics (2002, HMC)
- Arizona Winter School (2004, University of Texas, Austin)
- Southern California Number Theory Day (2004, UCI)
- Western Number Theory Conference (2004, UNLV)
- The Lichtenbaum Conjectures: Progress and Prospects (2005, Brown)
- Southern California Number Theory Day (2005, UCSD)
- Open Questions and Recent Developments in Iwasawa Theory (2005, Boston)
- Southern California Number Theory Day (2005, UCI)
- Arizona Winter School (2006, University of Arizona)
- Southern California Number Theory Day (2006, UCSD)
- Southern California Number Theory Day (2006, UCI)
- Southern California Number Theory Day (2007, UCSD)
- Arizona Winter School (2007, University of Arizona)
- Curves, abelian varieties and their interactions (2007, UGA)
- Southern California Number Theory Day (2007, UCI)

## SELECTED TALKS

- Presented the undergraduate honor thesis, “Sums of Powers of Kloosterman Sums” (2002, UCSD)
- Presented an expository talk on “Sophie Germain Primes and Primes is in P” at UCI Number Theory Seminar (2002, UCI)
- Presented a seminar talk on “Sums of Powers of Kloosterman Sums” at UCI Number Theory Seminar (2003, UCI)
- Presented a seminar talk on “Exponentially Interesting Sums” at UCI MGSC Seminar (2006, UCI)
- Presented a seminar talk on “The DDVV Conjecture and Comass in Calibrated Geometry” at Geometry Seminar (2007, CSUF)

## RECENT EXPERIENCES:

September 2002 to present	Graduate Teaching Assistant UCI Department of Mathematics
June 2004 to June 2007	Summer School Instructor UCI Department of Mathematics
February 2004 to present	MATHCOUNTS Grader UCI Department of Mathematics
February 2007	Sally Ride Science Festival Volunteer University of California, Irvine
June 2001 to May 2002	Software Developer International Space Station EarthKAM, La Jolla, California

## **SPECIAL AND TECHNICAL SKILLS:**

### ***Programming skills:***

- C++ and Java with emphasis on scientific computation
- W3C standards-compliant HTML

### ***Software skills:***

- Skilled use of L<sup>A</sup>T<sub>E</sub>X scientific/mathematical typesetting software
- Skilled use of mathematics software *Mathematica*
- Mastery of DOS, Windows 9x/ME/XP, and Linux operating systems

### ***Other skills:***

- Building and maintaining computers
- Fluent spoken and written Korean
- Reading knowledge of Attic Greek
- Public speaking skills