

Curriculum Vitae

Dohoon Choi

Personal Data

School of Liberal arts and science
Koera Aerospace University,
Goyang, Korea

Tel.: (02)300-0077

E-Mail: choija@postech.ac.kr

Birthplace: Korea

Employment

Korea Aerospace University, September 2009. - present.
Assistant professor

Korea Aerospace University, September 2007. - August 2007.
Full time lecturer

Korea Institute for Advanced Study, April 2006. - August 2007.
Research Fellow

Education

Ph. D. in Mathematics, Postech (Field: Number Theory), February 2006.

M. A. in Mathematics, Postech, February 2003.

B. S. in Mathematics, Postech, February 2001.

Research Interests

Automorphic Forms and Modular Forms

Rational Points on Algebraic Varieties

- Publications**
18. *Non vanishing of Central values of modular L-functions for Hecke eigenforms of level*, (Co-author: Y. Choie), submitted for a publication.
 17. *Congruences for Siegel modular forms*, (Co-authors: Y. Choie and O. Richter), submitted for a publication.
 16. *Twisted traces of singular moduli of weakly holomorphic modular functions*, submitted for a publication.
 15. *Poincare series and the divisors of modular forms*, to appear in Proc. Amer. Math. Soc.
 14. *Congruences for level four cusp forms*, (Co-authors: S. Ahlgren and J. Rouse), Mathematical Research Letters, Volume 16, Issue 4, (2009) 683-701.
 13. *Partitions weighted by the parity of the crank*, (Co-authors: S. Kang, J. Lovejoy), Journal of Combinatorial Theory, Series A 116 (2009) 1034-1046.
 12. *p-adic Limit of Weakly Holomorphic Modular Forms of Half Integral Weight and Its Applications*, (Co-author: Y. Choie), to appear in Israel J. Math.
 11. *Weakly Holomorphic Modular Forms of Half-integral Weight with Non-vanishing Constant Terms modulo ℓ* , Trans. Amer. Math. Soc. 361 (2009), no. 7, 3817-3828.
 10. *Modular Forms of Half-integral Weight with Few Non-vanishing Coefficients Modulo ℓ* , Proc. Amer. Math. Soc. 136 (2008), 2683-2688.
 9. *Traces of Singular Moduli of Arbitrary Level Modular Functions*, (Co-authors: D. Jeon, S. Kang, C. Kim), Int Math Res Not, Vol. 2007, Article ID rnm110.

8. *Exact Formulas for Traces of Singular Moduli of Higher Level Modular Functions*, (Co-authors: D. Jeon, S. Kang, C. Kim), J. Number Theory, Volume 128, Issue 3, March 2008, Pages 700-707.
7. *The weight of half-integral weight modular forms with few non-vanishing coefficients mod ℓ* , (Co-author: T. Kilbourn), Acta Arith. 127 (2007), 193-197.
6. *The Space of Modular Forms Generated by Eta-quotients*, The Ramanujan Journal, Volume 14, Number 1, August, 2007, 69-77.
5. *Linear relation among the Fourier coefficients of modular forms and its applications*, (Co-author: Y. Choie), J. Math. Anal. Appl., Volume 326, Issue 1, 1 February 2007.
4. *On the congruence of Jacobi forms*, (Co-author: Y. Choie) Math. Z. 256 (2007), no. 2, 287-294.
3. *Weight-dependent congruence property of modular forms*, (Co-author: Y. Choie), J. Number Theory, Volume 122, Issue 2, February 2007, 301-313.
2. *A simple proof of Zagier duality of Hilbert modular forms*, Proc. Amer. Math. Soc. 134 (2006), 3445-3447.
1. *On values of modular function on $\Gamma_0(N)$* , Acta Arith. 121 (2006), 299-311.

Grant KRF 2008.7-2010.6

Invited talks

KIAS-POSTECH International Number Theory Workshop, 2009. 6. 26 - 2009. 6. 28, "Twisted traces of singular moduli of weakly holomorphic modular functions".

Max Planck Institute, International Conference: Mock theta functions and applications in combinatorics, algebraic geometry, and mathemat-

ical physics, 2009.5. 25 - 2009. 5. 29., “Poincaré series and divisors of modular forms”.

KMS Annual meeting, 2009, 4, 25, “Theta lifting and their arithmetic applications”.

Number Theory Workshop-Industrious Number Theory, 2009, 3, 11 - 2009, 3, 13, “Congruence for Siegel modular forms”.

KIAS Number Theory Seminar, 2009. 2. 12, “Non vanishing of central values of modular L-functions for level one”.

Chungnam University, Algebra workshop, 2009. 2. 9 - 11, “Twisted traces of singular moduli of weakly holomorphic modular functions”.

Pan Asian Number Theory Workshop, 2009. 1. 8 - 11, “Weakly holomorphic modular forms of half-integral weight with non-vanishing constant terms modulo l ”.

Summer School on Spectral Theory of Automorphic Forms, “Poincaré series and the divisors of modular forms”, 2008. 8. 11- 2008. 8. 15 (Upcoming).

Kaist, Department of Math, Number Theory seminar 2007. 6. 25, “Congruences for the partition function”.

University of Illinois at Urbana-Champaign, Department of Mathematics, Number Theory Seminar, 2008. 3. 4, “Divisibility of traces of CM values of modular functions”.

Kyushu University, Department of Math, Number Theory seminar 2007. 12. 21, “Congruences for modular forms of integral weight”.

Ewha Womans University, Department of Math, Number Theory seminar, 2007. 12. 6, “CM method of elliptic curves”.

Number Theory special session of KMS workshop, 2007. 10. 21, “modular forms of half integral weight with few non vanishing coefficients modulo l ”.

SNU Number Theory seminar 2007. 7. 11, “modular forms of half integral weight with few non vanishing coefficients modulo l ”.

POSTECH-Japan Number Theory Symposium 2007, 5 26, “Congruences for modular forms of integral weight and half integral weight”.

KAIST Number Theory Conference, 2007. 4. 1, “On Congruence of Jacobi Forms”.

KIAS-POSTECH-SNU International Number Theory Workshop, 2006.12.7-2004.12.9, “Congruence properties for modular forms of half integral weight”.

KIAS Number Theory Conference, 2006.6.19-2006.6.21, “Weight Dependent Congruence Properties of Modular Forms”.

POSTECH Number Theory Monthly Mini-Symposium, 2006. 4. 29, “The Space of Modular Forms Generated by Eta-quotients”.

KIAS-POSTECH-SNU International Number Theory Workshop, 2004.12.1-2004.12.2, “On values of modular function on $\Gamma_0(N)$ ”.

September 2009