Curriculum Vitae of Gang Yu

EDUCATION

2000   PhD in Mathematics, The University of Georgia

1994   MS in Mathematics
The University of Science and Technology of China, China

1991   BS in Mathematics
The University of Science and Technology of China, China

RESEARCH INTEREST   Number Theory, Combinatorics.

EMPLOYMENT

Kent State University (08/09 - present), Tenured associate professor

Kent State University (08/06 - 08/09), Tenure track assistant professor

University of South Carolina (08/03 - 06/07), Tenure track assistant professor
(*Resigned in 06/07 as associate professor*)

University of Michigan (09/00 - 08/03), Non-tenure track assistant professor

VISITING POSITIONS

Hong Kong University of Science and Technology (07/12 - 08/12), Visiting Scholar.

DIMACS, Rutgers University (01/00 - 04/00), Visitor

TEACHING EXPERIENCE

Have taught a variety of courses since 1998, including Calculus I, II, III, Maple labs, Differential Equations, Linear Algebra, Matrix Theory, Stochastic Processes, Undergraduate and Graduate Number Theory courses, etc.

SELECTED INVITED TALKS

Sept.2012: "L^1-norm of Littlewood polynomials", AMS sectional meeting, Rochester, NY.

May 2009: "A graph labeling problem", Combinatorial and Additive Number Theory, (CANT 2009), CUNY, NYC.

Dec. 2007: "Sum set v.s. difference set, and applications", PSU, State College, PA.

Jan. 2007: "Rank 0 quadratic twists of elliptic curves and related problems", City University of Hong Kong, Hong Kong, China.

Dec. 2006: "Some problems related to elliptic curves over $\mathbb{Q}$", University of Shanghai, Shanghai, China.

Oct. 2005: "An upper bound for $B_2[g]$ sets", Integer conference, Carrollton, GA.

Apr. 2005: "Wiener indices of molecular graphs", Clemson University.

Mar. 2005: "Wiener indices of trees", University of Dayton.

Nov. 2004: "On the ranks of quadratic twists of elliptic curves", UGA.

Mar. 2001: "On the divisibility of class numbers of real quadratic fields", given at the AMS sectional meeting, Columbia, SC.

Jan. 2001: "Rank 0 quadratic twists of a family of elliptic curves", given at the AMS sectional meeting, New Orleans, LA.

Sep. 2000: "On a special type of Diophantine equation", given at the AMS sectional meeting, Toronto, Canada.

SELECTED OTHER PRESENTATIONS GIVEN ON CONFERENCES

Dec. 2008: "A graph labeling and some related problems", 2008 West Coast Number Theory Conference, Fort Collins, Co.

May. 2007: "Some order 2 additive problems", 2007 Illinois Number Theory Fest, Urbana-Champaign, IL.

Apr. 2007: "Additive 2-bases of integers", 2007 Southeast regional meeting on numbers, Winston-Salem, NC.

Jun. 2005: "Frobenius distribution of elliptic curves", Workshop on number theory and random matrix theory, Waterloo, Ontario.

Apr. 2005: "Sato-Tate conjecture on average", 2005 SERMON, Columbia, SC.

Dec. 2004: "An upper bound of $B_2[g]$-sets", 2004 West Coast Number Theory Conference, Las Vegas, NV.

Apr. 2004: "E-symmetric numbers", 2004 SERMON, Charleston, SC.

Nov. 1999: "Average order of 2-Selmer groups of some families of elliptic curves", given on the first Midwest Arithmetical Geometry in Cryptography Workshop, Urbana-Champaign, IL.

Apr. 1999: "2-Selmer groups of elliptic curves", 1999 SERMON, Columbia, SC.

Dec. 1998: "2-Selmer groups of a family of elliptic curves", given at the 1998 West Coast Number Theory Conference.

Apr. 1998: "Divisors of a quadratic form", 1998 SERMON, Greensboro, NC.

PROFESSIONAL SERVICES

Co-organizer of the 2005 Southeast Regional Meeting on Numbers (Columbia, SC), the 2006 AMS Southeast Sectional Meeting (Fayetteville, AR) special session on "Analytic Number Theory and Modular Forms", and the 2012 AMS Central Sectional Meeting (Akron, OH) special session on "Additive and Combinatorial Number Theory".

Referee for more than 10 mathematical journals, including *Journal für die reine und angew. Math., Monatshefte fuer Mathematik, Journal of Number Theory, Acta Arith., The Electronic Journal of Combinatorial Number Theory, Journal of Discrete Mathematics, Discrete Applied Mathematics, Science Sinica, Acta Math Sinica, Acta Applicandae Mathematicae, International Journal of Mathematics and Mathematical Sciences, Houston Journal of Mathematics*, etc. Also reviewer for *MathReview*.

Editorial Board: Journal of Mathematical Research and Applications (a newly launched journal)

GRANTS

2006 - 2009: NSF Grant DMS0601033.

WORKS PUBLISHED OR TO APPEAR

26 (with John Hoffman) *A ternary additive problem*, to appear in Monatsh Math.

25 (with Hua Wang and Stephen Wagner) *Wiener indices of molecular graphs*, Discrete Appl. Math., 157(2009), no. 7, 1544-1554.

24 *Additive 2-bases of integers*, Proc. of AMS. 137 (2009), no. 1, 11-18.

23 *A note on $B_2[g]$ sets*, Integers: Electronic Journal of Combinatorial Number Theory, 8(2008), no. 1, paper A58.

22 *An upper bound for $B_2[g]$ sets*, J. of Number Theory, 122(2007), no. 1, 211-220.

21 (with Filaseta, Ford, Konyagin and Pomerance) *Sieving by large integers and covering systems of congruences*, Journal of AMS, 20(2007), 495–517.

20 (with Hua Wang) *All but 49 numbers are Wiener indices of trees*, Acta Applicandae Mathematicae, 92(2006), no. 1, 15–20.

19 (with Kevin James) *Average Frobenius distribution of elliptic curves*, Acta Arith. 124(2006), 79–100.

18 *Average size of 2-Selmer groups of elliptic curves, I*, Trans. of AMS. 358(2006), no. 4, 1563–1584.

17 *On the quadratic twists of a family of elliptic curves*, Mathematika, 52(2005), no. 1-2, 139–154.

16 *Average size of 2-Selmer groups of elliptic curves, II*, Acta Arith. 117(2005), 1–33.

15 *E-symmetric numbers*, Colloq. Math. 103(2005), 17–25.

14 (with Jianya Liu and Trevor Wooley) *The quadratic Waring-Goldbach problem*, Journal of Number Theory, 107(2004), 298–321.

13 *Rank 0 quadratic twists of a family of elliptic curves*, Compositio Mathematica, 135(2003), no. 3, 331–356.

12 *A note on the divisibility of class numbers of real quadratic fields*, Journal of Number Theory, 97(2002), 35–44.

11 *On the number of Divisors of the quadratic form m^2+n^2*, Canad. Math. Bull, 43(2000), no. 2, 239 – 256.

10 (with Minggao Lu) *On a problem of sums of mixed powers, II*, Chinese Ann. Math. Ser. B, 18(1997), no. 2, 243 – 248.

9 *The differences between consecutive primes*, Bull. London Math. Soc. 28(1996), no.242 – 248.

8 (with Minggao Lu and Hongbing Yu) *Waring's problem for polynomial summands, II*, (Chinese) Acta Math. Sinica 38(1995), no. 4, 451 – 461.

7 *Waring's problem with polynomial summands, I*, (Chinese) Chinese Ann. Math. Ser. A 16(1995), no. 3, 381 – 388.

6 *The average number of direct factors of a finite abelian group*, (Chinese) Acta Math. Sinica 37(1994), no. 5, 663 – 670.

5 (with Hongbing Yu) *A problem of Waring-Goldbach type*, J. China Univ. Sci. Tech. 24(1994), no. 2, 191 – 197.

4 *The distribution of 4-full numbers*, Monatsh Math. 118(1994), no. 1-2, 145 – 152.

3 *Number of finite non-isomorphic abelian groups in short intervals*, Chinese Sci. Bull. 39(1994), no. 6, 452 – 455.

2 (with Zheng Wang) *Estimation of complete exponential sums*, (Chinese) Chinese Sci. Bull. 37(1992), no. 10, 1441 – 1444.

1 *Squarefull numbers in short intervals*, (Chinese) Education and Modernization, special issue, 1992, 1 – 5.