

Dr. Bao Qi (Edward) Feng

Home Address: 730 Third Street NE, New Philadelphia, OH 44663

School Address: Kent State University at Tuscarawas,
330 University Dr. NE, New Philadelphia, OH 44663

Email: bfeng@kent.edu

Phones: Office 330-308-7416 Home 330-343-9273

Education

Ph.D. in Mathematical Sciences, Kent State University, August 18, 2001.

MS. in Mathematics & Statistics, Youngstown State University, June 1996.

BS. in Mathematics, Nanjing University, China, July, 1963

Honors

- *The recipient of the Distinguished Teaching Award, 2006 – 2007, Kent State University at Tuscarawas.*
- *Excellent Educator Recipient, Claymont High School, 2007.*
- *Nominee for the Distinguished Teaching Award, at the Tuscarawas Campus, Kent State University, 2002 – 2003.*
- *Nominee for the Distinguished Teaching Award, in the College of Arts and Sciences, Kent State University, 2002 – 2003.*
- *University Fellowship, Kent State University, Spring 2001.*
- *Graduate Assistantship, Kent State University, Fall 1996 – Summer 2001.*
- *Outstanding Graduate Student of Youngstown State University, 1996.*
- *Graduate Assistantship, Youngstown State University, Spring 1995 - Spring 1996.*
- *Scholarship, Youngstown State University, Summer 1995.*
- *Outstanding Teacher, 1980 and 1982, Harbin Normal College, Harbin, CHINA.*
- *Outstanding Teacher, 1972, 1973, 1975 and 1976, Dao Li Education Bureau, Harbin, China.*

Publications

- **B. Q. Feng,** [“On the infinitude of twin-primes”](#). *JP Journal of Algebra, Number Theory and Applications*, Vol. 33, Issue 2, 2014, pp 75 – 112.
- **B. Q. Feng,** [“A way approaches to the infinitude of primes”](#). *Journal for Algebra and Number Theory Academia*. Vol. 2, Issue 1, 2011, Pages 15 – 17.

- **B. Q. Feng**, A. Tonge, "[A Cauchy-Khinchin Integral Inequality](#)", *Linear Algebra and its Applications* Vol. 433, Issue 5, 15 October **2010**, pp 1024 – 1030. **MR2658653(2011f:26035)**
- **B. Q. Feng**, L. Feng and D. N. Zhao, "[A new view of the natural number set \$N\$](#) ". *JP Journal of Algebra, Number Theory and Applications*, Vol. 18, No. 2, June, **2010**, pp 145 – 164. **MR 2778280**
- **B. Q. Feng**, "[On the Explicit Selection Matrix of Relating the Tensor Products and Hadamard Products of Matrices](#)", *Far East Journal of mathematical Sciences (FJMS)* Vol. 39, No. 2, February **2010**, pp 209 – 219. **MR2662554(2011e:15046)**
- **B. Q. Feng** and A. Tonge, "[Matrix Versions of Some Refinements of the Arithmetic-Geometric Mean Inequality](#)", the *Journal of Mathematical Sciences: Advances and Applications*, Vol. 1, No. 2 (**2008**) August issue 243 - 264. **MR2530506 (2010d:26037)**
- **B. Q. Feng**, "The Geometric Means in Banach * Algebras", *J. Operator Theory*, **57: 2 (2007)**, 243-250. **MR2328997 (2008g: 47036)**.
- **B. Q. Feng** and A. Tonge, "[Equivalence constants for certain matrix norms II](#)", *Linear Algebra and its Applications* Vol. 420 (**2007**) 388 – 399. **MR2278215 (2007j:15023)**
- **B. Q. Feng** and Jinlu Li, "[Some Estimation of Banach Limits](#)", the *Journal of Mathematical Analysis and Applications*, Vol. 323 (**2006**), Issue 1, 481 – 496. **MR2262220 (2008b: 46033)**
- **B. Q. Feng** and A. Tonge, "[Geometric means and Hadamard products](#)", the *journal Mathematical Inequalities and Applications*, Vol. 8, (**2005**), No. 4, 559-564. **MR 2174883 (2006j: 15047)**.
- **B. Q. Feng** and Beth and Jeff Osikiewicz, "[Geometric means and tensor products](#)", *Far East Journal of Mathematical Sciences (FJMS)* Vol. 15 (**2004**), No. 3, 381-391. **MR 2131463 (2006e: 15033)**.
- **B. Q. Feng**, "Long Division to Synthetic Division", *Mathematics Teacher*, Volume 97, No.5, p.308. May **2004**.
- **B. Q. Feng**, "[Equivalence constants for certain matrix norms](#)", *Linear Algebra and its Applications* 374 (**2003**) 247 - 253; **MR 2008798 (2004h: 15038) 15A60**.
- The Mathematical Olympiad Committee of China (*the writer: B. Q. Feng*), "Summary of assigning the topics of 1987 Mathematical Olympiad of China", *Secondary Mathematics, Tianjin, China, No. 4, 1987*.
- **B. Q. Feng**, "On a variation of Lomonosov's theorem", (Chinese) *Northeast Mathematics, Jilin, China, Vol. 1, (1986) No. 2, 192 – 196*. **MR 0834065 (87g: 47010)**.
- **B. Q. Feng**, "Sets and inequalities", *Research of Teaching*, Harbin, China, Vol. 2, 1978.
- **B. Q. Feng**, "Sets and equalities", *Research of Teaching*, Harbin, China, Vol. 1, 1978.

- **B. Q. Feng** and Harbin 1st High School Group of Mathematics, “Exam should also make students learning vigorously, lively and initiatively”, *Bulletin of Mathematics, Beijing, China, No. 12, 1965*.
- S. W. Wang, Y. T. Lou and **B. Q. Feng**, “On the solutions of the Hammerstein integral equations III”, *Acta Mathematica Sinica*, Vol. 15 (1965), pp.63-73. **MR 0203532(34 #3382)**.
- **B. Q. Feng** and Z. G. Yu, “Permutation on the circle”, *Communication of Mathematics, Wuhan, China, 1958*.

Books

- **B. Q. Feng** and X. D. Ding, *Methods of Proof of Elementary Algebraic Identity*, Harbin, China: Heilongjiang People’s Publishing House, **1984**.
- **B. Q. Feng** and X. D. Ding, *Methods of Proof of Trigonometric Identity*, Harbin, China: Heilongjiang People’s Publishing House, **1982**.
- F. C. Lao, **B. Q. Feng**, G. Q. Xin and Y. B. Wang, *Key to the Mathematics Exercises (3)*, Harbin, China: Heilongjiang People’s Publishing House, **1979**.

Presentations at Professional Meetings

- **Bao Qi Feng** “There is an infinite number of twin primes: An application of set theory”, presented at The Joint Mathematics Meetings, San Diego, January 9 – 12, 2013, Abstracts of AMS, 2013. Vol. 34, Number 1, Issue 171 (1086-VO-1591), pp.522.
- **Bao Qi Feng** and Jinlu Li, “Banach Limits and Their Values”, 2007 Spring Meeting of the Ohio Section of MAA, April 23 - 24, 2007 Shawnee State University.
- **B. Q. Feng**, “The Hadamard Product and Tensor Product of Matrices”, presented at *the Annual Joint Mathematics Meeting* of AMS and MAA, in Atlanta, GA, January 5-9, 2005, Abstracts of AMS, 2005 (#1003-15-332).
- **B. Q. Feng**, “A New Identity of the Binomial Type”, Presented at the MAA *Ohio* section Fall Meeting at John Carroll University, October 22-23, 2004.
- **B. Q. Feng**, “The Geometric Mean in Banach *-Algebra”, presented at *the Annual Joint Mathematics Meeting* of AMS and MAA, in Phoenix AZ, January 7-10, 2004 Abstracts of AMS, 2004 (#993-47-769).
- **B. Q. Feng**, “The beauty of mathematics --- How to introduce the synthetic division of polynomials in classroom”, presented at the MAA *Ohio section Fall Meeting*, October 25-26, 2002.
- **B. Q. Feng** and A. Tonge, “A Cauchy-Khinchin type integral inequality”, presented at the conference of topology /analysis, *Youngstown State University*, March 23, 2001.

- **B. Q. Feng**, “How to prove trig identities”, Presented at the *Joint Mathematics Meeting* of AMS & MAA in New Orleans, January 2001. Abstracts of AMS, 2001 (#962-97-727)
- **B. Q. Feng** and D. N. Zhao, “On the Extensions of Eratosthenes’ Sieve”, presented at the *Annual Joint Mathematics Meeting* of AMS and MAA in San Antonio, January 1999. Abstracts of AMS, 1999 (#939-11-34)
- **B. Q. Feng**, “On the variation of the Lomonosov theorem”, presented at the *Annual Joint Mathematics Meeting* of AMS and MAA in Phoenix, January 1989. Abstracts of AMS, 1989 (#847-47-557)

Other Academic Activities

- Referee for review of the Journal of Inequalities and Applications. September, 2014. Refereeing: “On a probability inequality of van Dam” by Yan Zizong and Zhang Yuemei.
- Referee for review of the Journal of *Publications Mathematicae Debrecen*, June, 2014. Refereeing: PMD-7042. “Some numerical characteristics of Sylvester and Hadamard matrices”.
- Referee for review of the journal of *Quaestiones Mathematicae* : May 2013. Ref. ID. TQMA-2011-0049, “Density by moduli and statistical convergence”.
- Referee for review of the Journal of *Nonlinear Analysis Series B: Real World Applications*, July, 2007. Ref. No. NONRWA-D-07-00216 “On the Existence of Nash Equilibriums for Infinite Matrix Games”.
- Referee for review of the Journal of *Computer and Mathematics with Applications*, March, 2006. CAM6635 “Existence of Solutions for Abstract Economic Equilibrium Problems and Algorithm”.
- Referee for review of the Journal of *Mathematical Analysis and Applications*, January, 2006. JMAA-05-2403 “Invariant Closed Surface and Stability of Non-hyperbolic Equilibrium Point for Polynomial Differential Systems in R^3 ”.
- Referee for review of the Journal of *Mathematical Analysis and Applications*, October, 2005. JMAA-05-1918R2 “Equivalent σ - Finite invariant Measures”.
- **Chaired** AMS Session on Operator Theory, Friday, January 9, 2004, 8:00am - 10:00am, *Joint Mathematics Meeting* of AMS, MAA and etc., at Phoenix, AZ, January 7 - 10, 2004.
- Grand Awards Judge for Mathematics 2003 Intel International Science and Engineering Fair, May 13-14, 2003, Cleveland, Ohio, USA.
- Head coach of 1998 Thinking Quest International Web Development Contest (<http://library.thinkquest.org/17119>)
- Mathematical Olympiad Committee of CHINA for assigning topics, 1987
- Mathematical Olympiad Committee of Harbin city and Heilongjiang Province of China for assigning topics, 1978 – 1988.

- Trainer of Mathematical Olympiad teams of Harbin city, CHINA, 1978 – 1988.

Research Interests

- Matrix Inequalities and Multilinear Analysis
- Functional Analysis
- Number Theory
- Mathematical Methodology and Mathematical Education

Teaching Experience

| | |
|---------------------|--|
| 2007-present | <i>Tenure and Associate Professor</i> , Department of Mathematical Sciences, Kent State University at Tuscarawas, OH, USA |
| 2001-2007 | <i>Tenure-track Assistant Professor</i> , Department of Mathematical Science, Kent State University at Tuscarawas, OH, USA |
| 1996-2001 | <i>Teaching Assistant in Mathematics</i> , Department of Mathematical Science, Kent State University, Kent, OH, USA |
| 1994-1996 | <i>Teaching Assistant in Mathematics</i> , Department of Mathematics and Statistics, Youngstown State University, OH, USA |
| 1985-1989 | <i>Associate Professor, Vice Chairman</i> , Department of Mathematics, Harbin Normal College, Harbin, CHINA |
| 1978-1985 | <i>Lecturer</i> , Department of Mathematics, Harbin Normal College, Harbin, CHINA |
| 1963-1978 | <i>Mathematics Instructor, Head</i> of Math Department During 1974 to 1978, Harbin 1 st High School, Harbin, CHINA |

Courses Taught

- MATH 10020 – 10024 Basic Math, 12 sections, during Fall 2010 – Spring 2014
- MATH 11008 Exploration in Modern Mathematics, 5 sections, during Fall 2010 – spring 2014
- MATH 11009 Modeling Algebra, 10 sections, during Fall 2010 – Spring 2014
- MATH 11010 Algebra for Calculus, 7 sections, during Fall 2010 – Spring 2014

- MATH 11012 Intuitive Calculus, 2 sections, Fall 2011 and Spring 2014
- MATH 11022 Trigonometry, 3 sections, Fall 2012, Spring 2013 and Fall 2013
- MATH 10021 Core Mathematics I, 1 section of Spring 2010
- MATH 10022 Core Mathematics II, 1 section of Spring 2010
- MATH 10023 Core Mathematics III, 1 section of Spring 2010
- MATH 10031 Fundamental Mathematics I, 2 sections of Summer 2007, Summer 2008,
- MATH 10032 Fundamental Mathematics II, 3 sections of Summer 2007, 2 in Fall 2008
- MATH 10033 Fundamental Mathematics III, 2 sections of Fall 2008, Spring 2009
- MATH 10034 Fundamental Mathematics IV, 4 sections of Summer 2008, Fall 2008, 2 in Spring 2009
- MATH 10035 Fundamental Mathematics V, 1 sections of Spring 2009
- MATH 10036 Fundamental Mathematics VI, 2 sections of Summer 2008, Spring 2009
- MATH 10004 Developmental Mathematics, 7 sections of Fall 2001, Fall 2002, Fall, 2003, Spring 2004, Fall 2004, Fall 2005, and Summer 2007
- MATH 10005 Introduction to College Mathematics, 8 sections of Spring 2003, Summer 2003, Fall 2003, Spring 2004, Summer 2004, Fall 2004, Spring 2005, Spring 2008
- MATH 11008 Exploration in Modern Mathematics, 1 section of Summer 2008
- MATH 11009 Modeling Algebra, 3 section of Fall 2008, spring 2009, Summer 2009, 2 sections in Fall 2010.
- MATH 11010 Algebra for Calculus, 1 section in Spring 2010, 1 section in Fall 2010
- MATH 11011 College Algebra, 14 sections of Fall 2001, Spring 2002, Fall 2002/801, Fall 2002/850, Fall 2003, Fall 2004, Spring 2005/802, Spring 2005/850, Fall 2005, Spring 2006, Fall 2006, Fall 2007/801, Fall 2007/802 Spring 2008
- MATH 11012 Intuitive Calculus, 16 sections of Fall 2001, Spring 2002, Fall 2002, Summer 2003, Spring 2004/801, Spring 2004/802, Summer 2004, Spring 2006, Summer 2006, Spring 2007, Summer 2007, Spring 2009, 2 in Summer 2009, Spring 2010, Summer 2010
- MATH 11022 Trigonometry, 5 sections of Fall 2001, Spring 2005, Spring 2007, Spring 2008, Spring 2009, Spring 2010
- MATH 12001 Algebra and Trigonometry, 3 sections of Fall 2002, Fall 2005, Fall 2007
- MATH 12002 Analytic Geometry and Calculus I, 3 sections of Spring 2003, Spring, 2006, Spring 2008
- MATH 12003 Analytic Geometry and Calculus II, 2 sections of Fall 2006, Fall 2008

- MATH 19002 Technical Mathematics II, 2 section of Spring 2003, Spring 2007
- MATH 22005 Analytic Geometry and Calculus III, 1 section Spring 2007
- MATH 34001 Fundamental Concepts of Algebra, 1 section of Summer 2009
- MATH 34002 Fundamental Concepts of Geometry, 1 section of Summer 2008
- MATH 41021 Theory of Matrix, 1 section Summer 2006
- *College Algebra, Trigonometry and intuitive Calculus* at Kent Campus, Kent State University, September, 1998 to December 2000.
- *Number Theory, Linear Algebra, Complex Analysis, Real Analysis, Functional Analysis and Research in Elementary Mathematics* at Harbin College, Harbin, China, September 1978 to January 1989.
- *Algebra, Trigonometry, Solid Geometry and analytic Geometry* at Harbin 1st High school, Harbin, China, September 1963 to September 1978.

University Citizenship

- Kent State University level:
 - (1) A member, the University Research Council Screening Committee, Kent State University, 2006
 - (2) Faculty Senate Alternate (representative of the Tuscarawas Campus) of Kent State University, for three years terms beginning in March 2006.
 - (3) *A member of the International Affairs Advisory Council, Kent State University, Fall 2004 – 2007.*
 - (4) A member of the *Asia Committee, International Affairs Advisory Council, Kent State University, Spring 2005 – 2007.*
- Department Level:

A member of *the Undergraduate Studies Committee* of the Department of Mathematical Sciences, KSU, Fall 2005 - Spring 2006.
- Tuscarawas Campus:
 - (1) A member, the Committee of Promotion, Tenure and Reappointment, Tuscarawas Campus, KSU, 2007 – 2014.
 - (2) A member, the Diversity Committee, Tuscarawas Campus, KSU, 2007 – 2014
 - (3) A member, the Student Affair Committee, Tuscarawas Campus, KSU, 2012 - 2014
 - (4) A member, the Search Committee for the director of the Library of Kent State University at Tuscarawas, 2010.

- (5) A member, the Economics Assistant Professor Search Committee, Tuscarawas Campus. KSU, 2007 - 2008.
- (6) A member, the Veterinary Technology NTT Assistant Professor Search Committee, 2006- 2007
- (7) *Chaired the Library Committee*, Tuscarawas Campus, KSU, Fall 2005 to Spring 2008. A member of the committee, 2009 - 2010
- (8) Represented at *The Fourth Annual Kent State Tuscarawas Math Awareness Week*. The title was “The mathematical induction”, April 18, 2006.
- (9) Represented at *The Third Annual Kent State Tuscarawas Math Awareness Week*. The title was “One to one”, April 6, 2005.
- (10) A member of *The Search Committee (Chairperson Denise Ayers) for NTT assistant professor position of Nursing*, Tuscarawas Campus, KSU, 2004-2005.
- (11) A member of *The Search Committee (Chairperson Flo Smith) for a position of Outreach Program Coordinator and Marketing Associate* in the Department of Continuing Studies and Community Development, Tuscarawas Campus, KSU, 2004-2005.
- (12) A member of *Search Committee (Chairperson Terri Chapman) for three tenure-track and NTT assistant professor positions of Nursing*, Tuscarawas Campus, KSU, July-August 2005.
- (13) Represented at *The Second Annual Kent State Tuscarawas Math Awareness Week*. The title was “Divisibility and the relationship between people and people”, April 5, 2004.
- (14) A member of *The Library Committee*, Tuscarawas Campus, KSU, Fall 2002 - Spring 2005 and 2008- 2009.
- (15) A member of *The Student Affairs Committee*, Tuscarawas Campus, KSU, Fall 2003 - Spring 2004.
- (16) A member of *The Search Committee for tenure-track assistant professor position of Psychology*, Tuscarawas Campus, KSU, 2003-2004.
- (17) A member of *The Academic Affairs Committee*, Tuscarawas Campus, KSU, 2002-2003.
- (18) A member of *The Search Committee for tenure-track assistant professor position of psychology*, Tuscarawas Campus, KSU, 2002-2003.
- (19) A member of *The Institutional Diversity Advisory Committee* at Tuscarawas Campus, Kent State University, 2001 – present.
- (20) A member of *The Electronics Communications Committee* at Tuscarawas Campus, Kent State University, 2001 – 2002, 2010.

Professional Membership

- American Association for the Advancement of Science (AAAS), Washington D. C., USA. Since May 2011.
- American Mathematical Society, Providence, RI, USA. Since 1996.
- Mathematical Association of America, Washington D. C., USA. Since 1998.
- Council of Harbin branch of Chinese Mathematical Society, Harbin, CHINA (1985 – 1989).