

# CURRICULUM VITAE

Fang, Kai-Tai, September 28, 2012

**Present Position:** Professor  
Director, Institute of Statistics and Computational Intelligence  
**Institution:** Beijing Normal University-Hong Kong Baptist University  
United International College (UIC)  
**Mailing Address:** BNU-HKBU United International College  
28 Jinfeng Road, Tangjiawan  
Zhuhai, Guangdong, China, Postal Code 519085  
**Email:** ktfang@hkbu.edu.hk  
**Telephone:** (86-756)-3620600 (Office), (86-756)-3620888 (Fax)  
**Elected Membership:** International Statistical Institute, 1985–  
**Elected Fellowship:** Institute of Mathematical Statistics, 1992–  
American Statistical Association, 2001–  
**Honorary Position:** Emeritus Professor, Hong Kong Baptist University, 2006–

## I. Education:

|                                                            |           |
|------------------------------------------------------------|-----------|
| The High School of Yangzhou, Jiangsu                       | 1951–1957 |
| The Department of Mathematics, Peking University           | 1957–1963 |
| Post Graduate in Institute of Mathematics, Academia Sinica | 1963–1967 |

## II. Academia Experience:

### Academia Position:

- Assistant Research, 1967–1978, Institute of Math., Academia Sinica.
- Assistant Professor, 1978–1979, Institute of Math., Academia Sinica.
- Assistant Professor, 1979–October 1980, Institute of Applied Mathematics, Academia Sinica.
- Associate Professor, October 1980–July 1986, Institute of Applied Mathematics, Academia Sinica.
- Professor, July 1986–, Institute of Applied Math. Academia Sinica.
- The Deputy Director of Institute of Applied Math. Academia Sinica, March 1984–1992.
- Reader, Department of Mathematics, Hong Kong Baptist University, 1991–1993.
- Chair Professor, Department of Mathematics, Hong Kong Baptist University, April 1993 - January 2006.
- Head, Department of Mathematics, Hong Kong Baptist University, 2003–2005.
- Director, Statistics Research and Consultancy Centre, Hong Kong Baptist University, 1992–2005.
- Coordinator of Statistics Programme, BNU-HKBU United International College, September 2005–
- Director, Institute of Statistics and Computational Intelligence, BNU-HKBU United International College, April 2006–
- Chairman, Scholarship & Financial Aid Committee, UIC, 2006–2009.
- Chairman, Research Coordination Committee, UIC, 2009–
- Emeritus Professor, Hong Kong Baptist University, 2006–

- Professor, The key Lab of Random Complex Structures and Data Analysis, The Chinese Academy of Sciences, December, 2008–

#### **Academic Visiting:**

- Visiting Fellow, October 1980–June 1981, Yale University.
- Visiting Scholar, June 1981–October 1982, Stanford University.
- Guest Professor, October 1985–March 1986, Swiss Federal Institute of Technology.
- Exchange Visiting, September 1987–October 1987, Chinese University of Hong Kong.
- Visiting Professor, January 1988–June 1988, The University of North Carolina at Chapel Hill.
- Visiting Professor, June 1988–July 1988, University of California, Los Angeles.
- Visiting Scholar, September 1990–August 1991, Hong Kong Baptist College.
- Visiting Scholar, June–July 2000, The University of New South Wales, Sydney.

#### **Academic Service:**

- Member, Chinese Side of Program Committee of China-Japan Symposium on Statistics, 1984, Beijing.
- Member, Chinese Side of Organizing Committee of Japan-China Symposium on Statistics, 1986, Fukuoka, Japan.
- Vice Chairman, Chinese Side of Organizing Committee of The Sino-American Statistical Meeting, 1987, Beijing.
- Organizer, Section of Multivariate Analysis under Non-normal Population, IMS Meeting, 1988, Colorado.
- Member, Chinese Side of Organizing Committee of Japan-China Symposium on Statistics, 1989, Tokyo, Japan.
- Member, Chinese Committee of The Asian Mathematical Conference, August 1990, Hong Kong.
- Member, The Committee of The First Conference On Recent Developments in Statistics Research, International Chinese Statistical Association, December 1990, Hong Kong.
- Chairman, The Local Organizing Committee and The Member of The International Program Committee, International Symposium on Multivariate Analysis and Its Applications, 1992, Hong Kong.
- Member, Chinese Side of Organizing Committee of Japan-China Symposium on Statistics, 1994, Okayama, Japan.
- Organizer, International Workshop on Quasi-Monte Carlo Methods and Their Applications, 1995, Hong Kong.
- Chairman, 1997 International Symposium on Contemporary Multivariate Analysis and Its Applications, May 1997, Hong Kong.
- Chairman, 1999 Symposium on Theory of uniform Design and Its Applications, October 1999, Hong Kong.
- Co-Chairman, The 4th Monte Carlo and Quasi-Monte Carlo Conference in Scientific Computing, 2000, Hong Kong.
- Member, International Organizing Committee, The 5th ICSA Conference, August 16-19, Hong Kong.
- Member, International Organizing Committee, The 5th International Conference on Optimization Techniques and Applications, December 15–17, 2001, Hong Kong.

- Member, Scientific Program Committee, 5th International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing, November 25–28, 2002, Singapore.
- Member, Scientific Committee, International Conference on Applied Statistics, Actuarial Science and Financial Mathematics, December 17–19, 2002, Hong Kong.
- Chairman, 2003 Symposium on The Uniform Experimental Design, 2-5 November, 2003, Shenzhen, China.
- Honorary Advisor, The 6th ICSA International Conference, July 21-23, Singapore.
- Member, Organizing Committee, International Conference on Chemometrics and Biometrics in Asia, October 16-20, Shanghai.
- Member, Executive Committee, The International Congress of Chinese Mathematicians (ICCM), December 2004, Hong Kong.
- Chairman, International Workshop on Applied Mathematics and Statistics, December 16, 2004, Hong Kong.
- Member, International Program Advisory Committee, International Conference on the Future of Statistical Theory, Practice and Education, December 29, 2004 - January 1, 2005, Hyderabad, India.
- Member, the Program Committee, 2005 International Symposium on the Uniform Experimental Design, 19-23 August, Jizhou, Hunan Province, China.
- Member, the International Advisory Committee, International Conference on Design of Experiments: Theory and Applications, May 13 - 15, 2005, Memphis, USA.
- Member, The International Committee, International Conference: Statistics in the Technological Age, 27 - 31 December, 2005, Kuala Lumpur, Malaysia.
- Member, IMS Fellows Committee, 2007-2009.

## Visiting and Giving A Lecture

Anhui University, October 2001.  
 Beijing Institute of Technology, May 1999 and May 2002.  
 Cambridge, England, March 1986.  
 Central China Normal University, April 2001, November 2002, April 2006 and June 2008.  
 Central South University, Changsha, October 2004.  
 Centrum voor Wiskunde Infomatica, Netherlands, February 1986.  
 Chinese University of Hong Kong, Oct. 1987, Oct. 1996 and Feb. 2000.  
 City University of Hong Kong, April 1993.  
 Columbia University, September 1982.  
 East China Normal University, October 2000, June 2008.  
 Ford Motor Company, July-August, 2002, June and July, 2003.  
 George Institute of Technology, February 1988.  
 George State University, Atlanta, February 1988.  
 George Washington University, Washington D.C., September 1982.  
 Guangdong University of Business Studies, May, 2009.  
 Guangzhou University, March, 2010.

Harbin Institute of Technology, Shenzhen Graduate School, April, 2008.  
 Hefei University of Science and Technology, Oct. 2001, Sep. 2003.  
 Hong Kong Polytechnic University, October 1990 and January 1991.  
 Hong Kong Statistical Society, March 1991.  
 Hong Kong University of Science and Technology, 1992.  
 Imperial College London, March 1986.  
 Institute of Applied Mathematics, Chinese Academy of Sciences, September, 2009  
 Institute of System Sciences, Chinese Academy of Sciences, Mar. 1983 and Nov. 1994  
 Jiaxing University, Jiaxing, China, October 2004.  
 Jilin University, June 2002.  
 Kyushu University, Japan, November 1986.  
 London School of Economics, June 2004.  
 Lund University, Sweden, June 2001.  
 Maryland University, September 1982, March 1988 and May 2000.  
 Nankai University, September 1987.  
 National Cheng Kung University, Tainan, November 2002.  
 National Sun Yat-sen University, Kaohsiung, November 2002.  
 National University of Singapore, December, 2003  
 Manchester University, June 2004.  
 Northeast Normal University, June 2002.  
 Osaka University, Japan, November 1986.  
 Oxford, England, March 1986.  
 Peking University, September 1984, November 1994 and December 2000.  
 Princeton University, September 1982.  
 Rutgers University, September 1982.  
 Seoul National University, May 2002.  
 Shanghai Normal University, June 2008.  
 Sichuan University, Chengdu, May 2005 and July 2006  
 Simon Fraser University, Canada, October 1982.  
 South Carolina University, Columbia, February 1988.  
 South China Normal University, May 2009.  
 Suzhou University, May 1986 and October 2001.  
 St. Jude Children's Research Hospital, Memphis, July 2001.  
 Stanford University, March 1981 and May 1982.  
 State University of New York at Buffalo, May 1988.  
 Sun Yat-sen University, Guangzhou, April 1986, June 1992, April 2011.  
 Tamkang University, Taiwan, December 2003.  
 Tampere University, August-September 1994, August 1999.  
 The George Washington University, September 1982.  
 Tongji University, Shanghai, October 2004.  
 Tsinghua University, China, April 2001 and May 2002.  
 Universitaet of Augsburg, July 2004.  
 University of Berne, Switzerland, January 1986.  
 University of Chicago, May 1988.  
 University College London, March 1986.

University of Erfurt, June-July 2004.  
 University of Florida, Gainesville, May 1988.  
 University of Hong Kong, 1986, 1990, 1994 and 1997.  
 University of Manchester, June, 2004.  
 University of North Carolina at Chapel Hill, January to June, 1998  
 University of North Carolina at Charlotte, May 1995.  
 University of Pennsylvania, September 1982 and March 1988.  
 University of Sheffield, June 2004.  
 University of Waterloo, Canada, May 1988.  
 University of Wisconsin at Madison, May 1988.  
 Uppsala University, September 1994, July-August 1999 and June 2001.  
 Victoria University of Wellington, November-December, 2010.  
 Wuhan University, December 1993, April 2001 and November 2002.  
 Xian Statistics College, October 1988 and May 2001.  
 Xian University of Finance and Economics, May 2008, May 2011.  
 Xiangtan University, April, 2006  
 Yale University, September 1982.  
 Yizheng Chemical Fiber Co., Ltd, November, 1994  
 York University, July 1996.  
 Zhongnan University of Economics and Law, April 2001 and November 2002.

### III. Memberships:

- Standing Director, The Chinese Society of Probability and Statistics, 1982–1990.
- The Secretary General, the Chinese Society of Probability and Statistics, 1982–1984.
- Ordinary member, International Statistical Institute, September 1985–.
- Council Member, International Statistical Institute, 1995–1999.
- Member, International Geological Mathematical Society, 1981–1985.
- Council Member, Chinese Geological Mathematical Society, 1978–1985.
- Member, Institute of Mathematical Statistics, 1988– .
- Executive Board and Vice Secretary General, Chinese Math Society, 1988–1992.
- Life-member, International Chinese Statistical Association, 1988– .
- Council member, International Chinese Statistical Association, 1990–1994.
- Member, Hong Kong Mathematical Society, 1990– .
- Member, Southeast Asian Mathematical Society, 1990– .
- Member, Hong Kong Statistical Society, 1991– .
- Honorary Member, Hong Kong Statistical Society, 2002– .
- Council member, Hong Kong Mathematical Society, 1994–1996.
- Member of American Statistical Association, 1993– .
- President, The Uniform Design Association of China, 1994–2003.
- Council Member, Hong Kong Institution of Science, 1994–1998.
- Honorary President of Anhui Society of Applied Statistics, 2001–2004.
- Honorary President of The Uniform Design Association of China, 2003–2007, 2007–2011.
- Honorary President, Experimental Design Section, The Chinese Society of Applied Statistics

#### IV. Editorship:

Editor of the following journals:

- Acta Math Applied Sinica, Associate Editor-in-chief, 1985–1992, Editor, 1992– .
- Chinese Journal of Applied Probability and Statistics Standing Editor, 1985–1990
- Journal of Mathematical Research and Exposition, 1986–
- Northeastern Mathematical Journal, 1985–
- Mathematics in Economics, 1984–
- Mathematical Statistics and Applied Probability, Consultant, 1986–
- Statistics & Probability Letters, 1988–2005.
- Statistica Sinica, 1993–1999, 2005–2012.
- Journal of Multivariate Analysis, 2002–2007.
- Statistics & Information Forum, 2009–
- International Statistical Review, 2009–2010

Editor-in-Chief for Book Series “Modern Applied Mathematics Methods”, 1990–2004.

Editor-in-Chief for Book Series “Statistics Textbook Series for Higher Education”, 2010–

#### V. Fields of Research:

Multivariate Analysis

Experimental Design

Distribution Theory

Applications of Number-theoretic Methods in Statistics

Data mining and applications of data mining to Chinese medicine

#### VI. Research Grants

- [1] Principal Investigator, “Some applications of number-theoretic method in optimization and statistics”, FRG/90-91/Gen-053 (II-02), HK\$24,315.
- [2] Principal Investigator, “Number theoretic methods for statistics and applications, RGC/91-92/04, HK\$345,000.
- [3] Principal Investigator, “Applied statistics and neural network for stock market analysis”, FRG/93-94/II-05, HK\$76,300.
- [4] Co-investigator, “The Hong Kong transition project”, RGC/93-94/08, HK\$300,000.
- [5] Principal Investigator, “Some problems in non-normal and non-linear multivariate statistics”, RGC/94-95/38, HK\$303,000.
- [6] Principal Investigator, “Generalized regression model and generalized quadratic forms”, FRG/94-95/II-49, HK\$54,000.
- [7] Co-investigator, “Quasi-Monte Carlo for scientific computing”, FRG/95-96/II-01, HK\$190,000.
- [8] Principal Investigator, “Non-central distribution and powers of some new multivariate tests”, FRG/96-97/II-15, HK\$99,869.

- [9] Principal Investigator, “Data base in statistical analysis and software for the uniform design”, TDG/9697/I/3, HK\$82,496.
- [10] Principal Investigator, “The Robustness and Efficiency of experimental designs for complex systems”, RGC/97-98/47, HK\$435,600.
- [11] Principal Investigator, “Construction of multivariate distributions with nonlinear dependence”, FRG/97-98/II-90, HK\$135,800.
- [12] Principal Investigator, “Multimedia Notes and Related Software for the Uniform Design”, TDG/9899/II/4, HK\$83,160.
- [13] Principal Investigator, “Statistical Inferences and experimental designs for Coordinate Measure Machine”, FRG/98-99/II-81, HK\$141,500.
- [14] Principal Investigator, “Connection Among Orthogonal, Optimal and Uniform designs”, HKBU RC/98-99/Gen-370, HK\$331,000.
- [15] Principal Investigator, “Some aspects in the uniform design of computer experiments”, FRG/00-01/II-25, HK\$148,800.
- [16] Principal Investigator, “The usefulness of uniformity in experimental designs and construction of uniform designs with large size”, RGC/HKBU 2044/02P, HK\$300,000.
- [17] Principal Investigator, “Repeatability and reproducibility for a standard test method by inter-laboratory tests for fingerprints of traditional Chinese medicines”, FRG/02-03/II-62, HK\$104,516.
- [18] Principal Investigator, “Efficient generation of low discrepancy point sets and their applications in experimental design and time series simulation”, GER/JRS/03-04/01, HK\$26,600.
- [19] Principal Investigator, “Applications of majorization to factorial, supersaturated and uniform designs”, FRG/03-04/II-711, HK\$90,000.
- [20] Principal Investigator, “Majorization Framework For Factorial, Supersaturated And Uniform Designs”, RGC/HKBU 200804, HK\$233,000.

## **VII. Academia Award:**

1. The Uniform Design, 1980, The 3rd Class Prize of Academia Sinica.
2. The Standardization of Dress of Chinese Adult, 1982, The Special Prize of the Ministry of Light Industry.
3. The Standardization of Shapes of Chinese Head, 1980, The 3rd Class Prize of Scientific and Technology of Beijing City.
4. A Unified Approach to the Distribution of Restricted Occupancy Problems, 1984, The 2nd Class Prize of Scientific & Technology of Academia Sinica.
5. Precision of Test Methods Determination, 1988, The 2nd Class Prize of National Standardization.
6. The Distributions in Some Military Random Coverage Problems, 1989, The 2nd Class Prize of Scientific & Technology of Academia Sinica.
7. Statistical Distributions, 1992, The First Class Award of Most Excellent Textbook, The State Statistical Bureau of The People’s Republic of China.
8. Generalized Multivariate Analysis, 1992, The Special Nationwide Award for Most Excellent Book in China, The Government Information and Publication Administration of The People’s Republic of China.
9. The first Class Prize of Scientific & Technology by the Chinese Army. 1992.

10. The citation number of works is the 9th highest one in China in 1998. *Chinese Science Citation Database*, 1998.
11. President's Award for Outstanding Performance in Scholarly Work, March 2001, Hong Kong Baptist University.
12. Honorary Member, Hong Kong Statistical Society, March 2002.
13. Outstanding author, Science Press, Beijing, 2004.
14. 2008 The State Natural Science Award at the Second Level with Wang Yuan.
15. 2012 Guangdong Excellent Teacher by the Guangdong Government.
16. 2012 Zhuhai Advanced Teachers by the Zhuhai Government.

#### **VIII. Guest/Adjunct Professorship:**

- Shandong Ocean University, 1984-1986.
- Suzhou University, 1985-1987.
- Nankai University, 1985-1987.
- Swiss Federal Institute of Technology, Oct. 1985-March 1986.
- Southeastern University, 1986-1989.
- Zhongshan University, 1992-1995.
- Yantai University, 1994-1997.
- Central China Normal University, 1998-2001.
- Sichuan University, 2001-2003.
- Xian Statistics College, 2001-2004
- Wuhan University, 2002-2004.
- Hefei University of Science and Technology, 2003-2005.
- Northeast Normal University, 2003-2005.
- Hefei University of Science and Technology, 2003-2005
- Peking University, 2003-2005.
- Central South University, 2004 - 2009.
- Xian University of Finance and Economics, 2008-2011.
- Zhongnan University of Economics and Law, 2002-2004.
- Distinguished Research Professor, Illinois Institute of Technology, USA, 2005-2008.
- The Key Lab of Random Complex Structures and Data Science, The Chinese Academy of Science, 2008-
- Guangdong University of Business Studies, 2009-2011.
- Hainan Normal University, 2009-

# PUBLICATIONS

Kai-Tai Fang

## Books:

- [19] Fang, K.T., Liu, M.Q. and Zhou, Y.D. (2011), *Design and Modeling of Experiments*, The Higher Education Press, Beijing (in Chinese).
- [18] Fang, K.T., Li, R. and Sudjianto, A. (2005), *Design and Modeling for Computer Experiments*, Chapman & Hall/CRC Press, London.
- [17] Pan, J.X. and Fang, K.T. (2002), *Growth Curve Models and Statistical Diagnostics*, Springer, New York.
- [16] Fang, K.T. and Ma, C.X. (2001), *Orthogonal and Uniform Experimental Designs*, Science Press, Beijing.
- [15] Fang, K. T. (1994), *Uniform Design and Design Tables*, Science Press, Beijing.
- [14] Fang, K. T. and Wang, Y. (1994), *Number-Theoretic Methods in Statistics*, Chapman and Hall, London.
- [13] Fang, K. T. and Zhang, Y. T. (1990), *Generalized Multivariate Analysis*, Science Press and Springer-Verlag, Beijing and Berlin.
- [12] Fang, K. T., Kotz, S., and Ng, K. W. (1990), *Symmetric Multivariate and Related Distributions*, Chapman and Hall Ltd., London and New York.
- [11] Fang, K. T. (1989), *Applied Multivariate Analysis*, East China Normal University Press, Shanghai.
- [10] Fang, K. T., Xiang, K. F. and Liu, G. Y. (1988), *Precision of Test Methods Determination*, Chinese Standardization Press, Beijing.
- [9] Fang, K. T., Quan, H. and Chen, Q. Y. (1988), *Applied Regression Analysis*, Science Press, Beijing.
- [8] *Linear Regression Analysis* (by G.A.F.Seber), Translation from English, Science Press, 1987, Beijing.
- [7] Fang, K. T. and Xu, J. L. (1987), *Statistical Distributions*, Science Press, Beijing.
- [6] Fang, K. T. and Pan, E. P. (1982), *Clustering Analysis*, Geological Publishing House, Beijing.
- [5] Zhang, Y. T. and Fang, K. T. (1982, 1999, 2003), *An Introduction to Multivariate Analysis*, Science Press, Beijing.
- [4] Fang, K. T. and Wu, C. Y. (1981), *Mathematical Statistics and Standardization*, Technical Standardization Press, Beijing.
- [3] Liu, C. W., Dai, S. S. and Fang, K. T. (1980), *Elements of Probability Papers*, Science Press , Beijing.
- [2] Fang, K. T. (1977, 1981), *The Analysis of Variance*, Science Press, Beijing.
- [1] Fang, K. T. and Dai, S. S. (1973, 1974, 1979), *Basic Methods of Mathematical Statistics* , Science Press, Beijing.

## Lecture Notes/Proceedings:

- [10] Fang, K.T., Liang, Y.Z and Yu, R.Q. (Eds) (2004), *Data Mining and Bioinformatics in Chemistry and Chinese Medicines*, Volume 2, Hong Kong Baptist University.
- [9] Fang, K.T., Liang, Y.Z and Yu, R.Q. (Eds) (2003), *Data Mining and Bioinformatics in Chemistry and Chinese Medicines*, Hong Kong Baptist University.

- [8] Fang, K.T., F.J. Hickernell and H. Niederreiter (Eds)(2001), *Monte Carlo and Quasi-Monte Carlo Methods 2000*, Springer, Berlin.
- [7] Anderson, T. W., Fang, K. T. and Olkin, I. (Eds) (1994), *Multivariate Analysis and Its Applications*, Institute of Mathematical Statistics, Hayward, California.
- [6] Chen, X. R., Fang, K. T. and Yang, C. C. (eds) (1992), *The Development of Statistics: Recent Contributions from China*, Longman Scientific & Technical, London.
- [5] Fang, K. T. and Anderson, T. W. (eds) (1990), *Statistical Inference in Elliptically Contoured and Related Distributions*, Allenton Press Inc., New York.
- [4] Fang, K. T. and Hickernell, F. J. (eds) (1995), *Proceedings Workshop Quasi-Monte Carlo Methods and Their Applications*, Hong Kong Baptist University.
- [3] Fang, K. T. and Hickernell, F. J. (eds) (1995), *Proceedings 1995 Workshop in Applied Statistics*, Hong Kong Baptist University.
- [2] Fang, K. T. and Lam, P. C. B. (eds) (1994), *Proceedings 1994 Workshop in Applied Statistics*, Hong Kong Baptist College.
- [1] An, H. Z., Fang, K. T., Hickernell, F. J., and Yang, Z. Z. Q. (1991), *Applied Statistics Lecture Series*, Hong Kong Baptist College.

#### Papers:

- [263] Zhou, Y.D. and Fang, K.T. and Ning, J.H. (2012), Mixture discrepancy for quasi-random point sets, *J. Complexity*, to appear.
- [262] Zhou, Y.D. and Fang, K.T. and Ning, J.H. (2012), Constructing uniform designs: a heuristic integer programming method *J. Complexity*, **28**, 224C237.
- [261] Wang, W.J., Zhou, Y.D. and Fang, K.T. (2011), Comparisons among different design and modeling methods for computer experiment, *J. Applied Statist. Management*, **30**(4), 686-695 (in Chinese).
- [261] Zhou, Y.D. and Fang, K.T. (2011), The sequential method for covering unit circle, *J. Applied Statist. Management*, **30**(2), 218-226 (in Chinese).
- [260] Zhou, Y.D. and Fang, K.T. (2011), A note on statistics simulation for geometric probability problems (in Chinese), *Sci Sin Math*, **41**(3), 253-264.
- [259] Fang, K.T. (2011), Uniform experimental design, in *International Encyclopedia of Statistical Science*, Springer, Ed by Lovric, Miodrag.
- [258] Ning, J.H., Fang K.T. and Zhou Y.D. (2011), Uniform Design for Experiments with Mixtures, *Communications in Statistics-Theory and Methods*, **40**. 1532-415.
- [257] Ning, J.H., Zhou Y.D. and Fang K.T. (2010), Discrepancy for uniform design of experiments with mixtures, *Journal of Statistical Planning Inference*, **141**(4):1487-1496.
- [256] Wang, Y and Fang, K.T. (2009), On number-theoretic method in statistics simulation, *Science in China, Series A*, 39(7): 1C8 (in Chinese) and **52**: 1-8 (in English), DOI: 10.1007/s11425-009-0126-3 DOI: 10.1007/s11425-009-0126-3.
- [255] Liang, J.J., Fang, K.T. and Hickernell, J.J. (2008), Some necessary uniform tests for spherical symmetry, *Ann. Inst. Stat. Math.*, **60**, 679-696.
- [254] Fang, K.T. and Hickernell, F. J. (2008), Uniform experimental design, in *Encyclopedia on Statistics in Quality and Reliability*, Volume 4, 2037-2040, Wiley, New York.
- [253] Fang, K.T. and Wang, Y. (2008), Number-theoretic Methods in Experimental Designs, in *AMS/IP Studies in Advanced Math.*, **42**, 797-818.

- [252] Fang, K.T., Y. Tang and J.X. Yin (2008), Lower bounds of various criteria in experimental designs, *J. Statist. Planning and Inferences*, **138**, 184-195.
- [251] Fang, K.T. and Dennis K.J. Lin (2008), Uniform design in computer and physical experiments, in *The Grammar of Technology development*, Edited by H. Tsubaki, K. Nishina, and S Yamada, 105-126, Springer.
- [250] Fang, K.T., J.J. Liang, F.J. Hickernell and R. Li (2007), A stabilized uniform Q-Q plot to detect non-multinormality, in *Random Walk, Sequential Analysis and Related Topics, A Festschrift in Honor of Yuan-Shih Chow*, Eds by A.C. Hsiung, Z. Ying and C.H. Zhang, World Scientific Publisher, new Jersey, 254-268.
- [249] Fang, K.T., A.J. Zhang and R. Li (2007), An Effective Algorithm for Generation of Factorial Designs with Generalized Minimum Aberration, *J. Complexity*, **23**, 740-751. Also appeared in *Festschrift for the 60<sup>th</sup> Birthday of Henryk Woźniakowski*, Eds by B. Kaciewicz, L. Plaskota, and G. Wasilkowski, Elsevier, 740-751, 2006.
- [248] Xie, M.Y., J.H. Ning and K.T. Fang (2007), Orthogonality and  $D$ -optimality of the U-type design under general Fourier regression models, *Statist. & Prob. Letters*, **77**, 1377-1384.
- [247] Yang, Z.H., K.T. Fang and S. Kotz (2007), On the inverse problem for the  $t$ -statistic, in *Asymptotic Theory in Probability and Statistics with Applications*, Eds by T.L. Lai, L. Qian and Q.M. Shao, Higher Education Press, 277-287.
- [246] Yang, Z.H., K.T. Fang and S. Kotz (2007), On The Student's  $t$ -Distribution and The  $t$ -statistic, *J. Multi. Analysis*, **98**, 1293-1304.
- [245] Tang, Y., M. Ai, G.N. Ge and K.T. Fang (2007), Optimal mixed-level supersaturated designs and a new class of combinatorial designs, *J. Statist. Planning and Inferences*, **137**, 2294-2301.
- [244] Ai, M.Y., Fang, K.T., and He, S.Y. (2007),  $E(\chi^2)$ -optimal mixed-level supersaturated designs, *J. Statist. Planning and Inferences*, **137**, 306-316.
- [243] Ying, H., R. Li, R., K.T. Fang and Y.Z. Liang (2007), Empirical Kriging models and their applications to QSAR, *J. Chemometrics*, **20**, 1-10.
- [242] Chatterjee, K., K.T. Fang and H. Qin (2006), A lower bound for centered  $L_2$ -discrepancy on asymmetric factorials and its application, *Metrika*, **63**, 243-255.
- [241] Qin, H., S.L. Zhang and K.T. Fang (2006), Constructing uniform designs with two- or three-level, *Acta Mathematica Sinica*, **26B**, 451-459.
- [240] Fang, K.T. and R. Mukerjee (2006), Empirical-type likelihoods allowing posterior credible sets with frequentist validity: higher order asymptotics, *Biometrika*, **93**, 723-733.
- [239] Peng, X.L., H. Yin, R.Z. Li and K.T. Fang (2006), The applications of Kriging and empirical Kriging based on the variable selected by SCAD, *Analytica Chimica Acta*, **578**, 178-185.
- [238] Liu, M.Q. and K.T. Fang (2006), A case study in the application of supersaturated design to computer experiments, *Acta Math. Scientia*, **26B**, 595-602.
- [237] Liu, M.Q., Fang, K.T. and Hickernell, F.J. (2006), Connections among different criteria for asymmetrical fractional factorial designs, *Statistica Sinica*, **16**, 1288-1297.
- [236] Fang, K.T., Maringer, D., Tang, Y. and Winker, P. (2006), Lower Bounds and stochastic optimization algorithms for uniform designs with three or four levels, *Math. Computation*, **75**, 859-878.
- [235] Fang, K.T. and L.Y. Chan (2006), Uniform design and its industrial applications, in "Springer Handbook of Engineering Statistics" Ed. by H. Pham, 229-247, Springer.
- [234] Fang, K.T., Y.Z. Liang, X.L. Yin, K. Chen, and G.H. Lu (2006), Critical value determination on similarity of fingerprints, *Chemometrics and Intelligent Lab. Systems*, **82**, 236-240.

- [233] Zhao, H.Y., Ricky N.S. Wong, K.T. Fang and Y. K. Yue (2006), Use of three-color cDNA microarray experiments to assess the therapeutic and side effect of drugs, *Chemometrics and Intelligent Lab. Systems*, **82**, 31–36.
- [232] Fang, K.T., Wang, S.G. and von Rosen, D. (2006), Restricted expected multivariate least squares, *J. Multivariate Analysis*, **97**, 619–632.
- [231] Fang, K.T. and Li, R. (2006). Uniform design for computer experiments and its optimal properties. *International Journal of Material and Product Technology*. **25**, 198–210.
- [230] Fang, K.T. (2006), Uniform designs, *Encyclopedia of Statistics*, **2nd Edition**, Volume 14, 8841–8850, Wiley, New York.
- [229] Fang, K.T. (2006), Spherical and elliptical symmetry, test of, **2nd Edition**, Volume 12, 7924–7930, Wiley, New York
- [228] Fang, K.T. (2006), Occupancy problems, **2nd Edition**, Volume 9, 5218–5722, Wiley, New York.
- [227] Fang, K.T. (2006), Elliptically contoured distributions, *Encyclopedia of Statistics*, **2nd Edition**, Volume 3, 1910–1918, Wiley, New York.
- [226] Zhang, A.J., Fang, K.T., Li, R. and Sudjianto, A. (2005), Majorization framework balanced lattice designs, *The Annals of Statistics*, **33** 2837–2853.
- [225] Fang, K.T., Tang, Y. and Yin, J. X. (2005), Lower bounds for wrap-around  $L_2$ -discrepancy and constructions of symmetrical uniform designs, *J. Complexity*, **21**, 757–771.
- [224] He, P., Fang, K. T., Liang, Y. Z. and Li, B. Y. (2005) A Generalized Boosting Algorithm and Its Application to Two-Class chemical Classification Problem, *Analytica Chimica Acta*, **543**, 181–191.
- [223] Yin, Xiao-Lin, Fang, Kai-Tai, Liang, Yi-Zeng, Wong, R.N.S. and Ha, A.W.Y. (2005), Assessing phylogenetic relationships of Lycium samples using RAPD and entropy theory, *Acta Pharmacologica Sinica*, **26**, 1217–1224.
- [222] Fang, K. T. and Mukerjee, R. (2005), Expected lengths of confidence intervals based on empirical discrepancy statistics, *Biometrika*, **92**, 499–503.
- [221] Liu, M. Q. and K.T. Fang (2005), Some results on resolvable incomplete block designs, *Science in China (Series A)*, **35**, 162–171 (in Chinese), **48**, 5–3–512 (in English).
- [220] Hu, Q.N., Liang Y.Z., Xu, Q.S., Fang, K.T., Peng, X.L. and Yin, H. (2005), Structural features hidden in the degree distributions of topological graphs, *J. Math. Chemistry*, **37**, 37–56.
- [219] Chatterjee, K., Fang, K.T. and Qin, H. (2005), Uniformity in factorial designs with mixed levels, *J. Statist. Plan. Infer.*, **128**, 593–607.
- [218] He, S., Yang, G. L., Fang, K. T., Widmann, John F. (2005), Estimation of Poisson intensity in the presence of dead time, *J. American Statist. Assoc.*, **100**, 669–679.
- [217] Mei, C.L., He, S.Y. and Fang, K.T. (2004), A note on the mixed geographically weighted regression model, *Journal of Regional Science*, **44**, 143–157.
- [216] Fang, K. T., Ge, G. N., Liu, M. and Qin Q. (2004), Construction of uniform designs via super-simple resolvable t-designs, *Utilitas Math.*, **66** 15–32.
- [215] Fang, K. T., Yin, H. and Liang, Y. Z. (2004), New approach by Kriging methods to problems in QSAR, *J. Chemical Information and Modeling*, **44**, 2106–2113.
- [214] Peng, X.L., Fang, K.T., Liang, Y.Z. and Hu, Q.N. (2004), Impersonality of the connectivity index and recomposition of topological indices according to different properties, *Molecules*, **9**, 1089–1099.
- [213] Fang, K.T., Ge, G.N., and Liu, M.Q. (2004), Construction of optimal supersaturated designs by the packing method, *Science in China (Series A)*, **47**, 128–143.
- [212] Fang, K.T. and Qin, H. (2004), Uniformity pattern and related criteria for two-level factorials, *Science in China Ser. A. Mathematics*, **34**, 418–428 (in Chinese), **48**, 1–11.

- [211] Shao, H. Y., Yue, P. Y. K. and Fang, K. T. (2004), Identification of differentially expressed genes with multivariate outlier analysis, *J. Biopharmaceutical Statistics*, **14**, 629-646.
- [210] Hu, Q.N., Liang, Y. Z., Yin, H., Peng, X. L., and Fang, K. T. (2004), Structural interpretation of a topological index. 2. The molecular connectivity index, the Kappa index, and the atom-type E-state index, *J. Chem. Inf. Computer. Sci.*, **44**, 1193-1201.
- [209] Hu, Q.N., Liang, Y. Z., Peng, X. L., Yin, H. and Fang, K. T. (2004), Structural interpretation of a topological index. 1. External factor variable connectivity index (EFVCI), *J. Chem. Inf. Computer. Sci.*, **44**, 437-446.
- [208] Qin, H. and Fang, K.T. (2004), Discrete discrepancy in factorial designs, *Metrika*, **60**, 59-72.
- [207] Fang, K. T. (2004), Theory, method and applications of the uniform experimental design, a historical review, *Application of Statist. and Management*, **23**, 69-80
- [206] Fang, K.T. and Mukerjee, R. (2004), Optimal selection of augmented pairs designs for response surface modeling, *Technometrics*, **46**, 147-152.
- [205] Fang, K.T., Ge, G.N, Liu, M.Q. and Qin, H. (2004), Combinatorial construction for optimal supersaturated designs, *Discrete Math.*, **279**, 191-202.
- [204] Fang, K.T., Lu, X., Tang, Y. and Yin, J. (2004), Construction of uniform design by using resolvable packings and coverings, *Discrete Math.*, **274**, 25-40.
- [203] He, P., Xu, C.J., Liang, Y.Z. and Fang, K.T. (2004), Improving the classification accuracy in chemistry via boosting technique, *Chemometrics and Intelligent Lab. Systems*, **70**, 39-46.
- [202] Ma, C.X. and Fang, K.T. (2004), A new approach to construction of nearly uniform designs, *International Journal of Materials and Product Technology* , **20**, 115-126.
- [201] Fang, K.T., Ge, G.N, and Liu, M.Q. (2004), Construction of optimal supersaturated designs by the packing method, *Science in China Ser. A Math.*, **47**, 128-143.
- [200] Fang, K.T. and Ge, G.N. (2004), A sensitive algorithm for detecting the inequivalence of Hadamard matrices, *Math. Computation*, **73**, 843-851.
- [199] Fang, K.T. and A. Zhang (2004), Minimum aberration majorization in non-isomorphic saturated designs, *J. Statist. Plan. Infer.*, **126**, 337-346.
- [198] Fang, K.T., Ge, G.N, Liu, M.Q. and Qin, H. (2004), Construction of uniform designs via super-simple resolvable  $t$ -designs, *Utilitas Mathematica*, **66**, 15-32.
- [197] Fang, K.T. Lin, D.K.J. and Liu, M.Q. (2003), Optimal mixed-level supersaturated design, *Metrika*, **58**, 279-291.
- [196] Hu, Q.N., Liang, Y.Z. and Fang, K.T. (2003), The matrix expression, topological index and atomic attribute of molecular topological structure, *J. Data Science*, **1**, 361-389.
- [195] Varmuza, K., He, P. and Fang, K.T. (2003), Boosting applied to classification of mass spectral data, *J. Data Science*, **1**, 391-404.
- [194] He, P., Fang, K.T. and Xu, C.J. (2003), The classification tree combined with SIR and its applications to classification of mass spectra, *J. Data Science*, **1**, 425-445.
- [193] Tang, Y., Liang, Y.Z. and Fang, K.T. (2003), Data mining in chemometrics: sub-structures learning via peak combinations searching in mass spectra, *J. Data Science*, **1**, 481-496.
- [192] Fang, K.T., Ge, G.N, and Liu, M.Q. (2003), Construction of optimal supersaturated designs by the packing method, *Science in China (Series A)*, **33**, 446-458, (In Chinese).
- [191] Fang, K.T. and Lin, D.K.J. (2003). Uniform designs and their application in industry, in *Handbook on Statistics 22: Statistics in Industry*, Eds by R. Khattree and C.R. Rao, Elsevier, North-Holland, 131-170.

- [190] Fang, K.T., Lu, X. and Winker, P. (2003), Lower bounds for centered and wrap-around  $L_2$ -discrepancies and construction of uniform designs by threshold accepting, *J. Complexity*, **19**, 692-711.
- [189] Fang, K.T., Lin, D.K.J. and Qin, H. (2003), A note on optimal foldover design *Statist. & Prob. Letters*, **62**, 245-250.
- [188] Fang, K.T., Deng, S.X. and Ma, C. X. (2003), Sequential optimal algorithm for evaluation of form and position error, *Acta Metrologica Sinica*, **24**, 6-9.
- [187] Wang, X. and Fang, K.T. (2003), The effective dimension and quasi-Monte Carlo integration, *J. Complexity*, **19**, No. 2, 101-124.
- [186] Hu, Q.N., Liang, Y.Z., Wang, Y.L., Xu, C.J., Zeng, Z.D., Fang, K.T., Peng, X.L. and Yin, H. (2003), External factor variable connectivity index, *J. Chem. Inf. Comput. Sci.*, **43**, 773-778.
- [185] Xu, Q.S., Massart, D.L., Liang, Y.Z. and Fang, K.T. (2003), Two-step multivariate adaptive regression spline for modeling a quantitative relationship between gas chromatography retention indices and molecular descriptors, *J. Chromatography A.*, **998**, 155-167.
- [184] Ma, C.X., Fang, K.T. and Lin, D.K.J. (2003), A note on uniformity and orthogonality, *J. Statist. Plan. Infer.*, **113**, 323-334.
- [183] Fang, K.T., Ge, G.N., Liu, M.Q. and Qin, H. (2003), Construction on minimum generalized aberration designs, *Metrika*, **57**, No 1, 37-50.
- [182] Fang, K.T. and H. Qin (2003), A note on construction of nearly uniform designs with large number of runs, *Statist. & Prob. Letters*, **61**, 215 - 224.
- [181] Mukerjee, R. and Fang, K.T. (2002), Fractional factorial split-plot designs with minimum aberration and maximum estimation capacity, *Statistica Sinica*, **12**, 885-903.
- [180] Fang, K.T. (2002), Theory, method and applications of the uniform design, *International J. Reliability, Quality, and Safety Engineering*, **9**, No. 4, 305-315.
- [179] Fang, K.T., Ge, G.N. and Liu, M.Q. (2002), Uniform supersaturated design and its construction, *Science in China, Ser. A*, **45**, 1080-1088.
- [178] Fang, K.T., Ge, G.N. and Liu, M.Q. (2002), Construction on  $E(f_{NOD})$ -optimal supersaturated designs via room squares, in *Calcutta Statistical Association Bulletin* Vol 52, A. Chaudhuri and M. Ghosh Eds., 71-84.
- [177] Deng, S., Liu, W., Fang, K.T. and Ma, C.X. (2002), Sequential number-theoretic algorithm for optimization to the evaluation of form errors, in *Proceedings of The 3rd International Conference on Quality and Reliability*, Eds by A.J. Subic et al., RMIT University, Melbourne, Australia, 203-208.
- [176] Fang, K.T. (2002), Experimental designs for computer experiments and for industrial experiments with model unknown, *J. Korean Statist. Society*, **31**, 277-299.
- [175] Fang, K.T. (2002), Theory, method and applications of the uniform design, in *Eighth ISSAT International Conference on Reliability and Quality in Design*, Eds by H. Pham and M.W. Lu, Anaheim, California, 235-239.
- [174] Fang, H.B., Fang, K.T. and Kotz, S. (2002). The meta-elliptical distributions with given marginals, *J. Multivariate Analysis*, **82**, 1-16.
- [173] Fang, K.T., Ma, C.X. and Winker, P. (2002), Centered  $L_2$ -discrepancy of random sampling and Latin hypercube design, and construction of uniform designs, *Math. Computation*, **71**, 275-296.
- [172] Liang, Y.Z., Fang, K.T. and Xu, Q.S. (2001), Uniform design and its applications in chemistry and chemical engineering, *Chemometrics and Intelligent laboratory Systems*, **58**, 43-57.
- [171] Fang, K.T., Ma, C.X. and R. Mukerjee (2001), Uniformity in Fractional Factorials, in *Monte Carlo*

- and *Quasi-Monte Carlo Methods 2000*, Eds by Fang, K.T., Hickernell, F.J. and Niederreiter, H., Springer, 232–241.
- [170] Fang, K.T. and Ma, C.X. (2001), Relationships Between Uniformity, Aberration and Correlation in Regular Fractions  $3^{s-1}$ , in *Monte Carlo and Quasi-Monte Carlo Methods 2000*, Eds by Fang, K.T., Hickernell, F.J. and Niederreiter, H., Springer, 213–231.
  - [169] Fang, K.T. (2001), Some Applications of Quasi-Monte Carlo Methods in Statistics, in *Monte Carlo and Quasi-Monte Carlo Methods 2000*, Eds by Fang, K.T., Hickernell, F.J. and Niederreiter, H., Springer, 10–26.
  - [168] Fang, K.T. and Ma, C.X. (2001), Wrap-around  $L_2$ -discrepancy of random sampling, Latin hypercube and uniform designs, *J. Complexity*, **17**, 608–624.
  - [167] Chan, L.Y., Fang, K.T. and Mukerjee, R. (2001), A characterization for orthogonal arrays of strength two via a regression model, *Stat. & Prob. Letters* **54**, 189–192.
  - [166] Zhao, Y. and Fang, K.T. (2001), Orthogonal exact designs on a sphere, a spherical cap, or a spherical belt, *J. Statist. Plan. Infer.*, **98**, 279–285.
  - [165] Fang, K.T., Yang, Z.H. and Kotz, S. (2001). Generation of multivariate distributions by vertical density representation, *Statistics*, **35**, 281–293.
  - [164] Shi, P., Fang, K.T., and Tsai, C.L. (2001), Optimal multi-criteria designs for Fourier regression model, *Journal of Statistical Planning and Inference*, **96**, 387–401.
  - [153] Ma, C.X. and Fang, K.T. (2001), A note on generalized aberration in factorial designs, *Metrika*, **53**, 85–93.
  - [162] Ma, C.X., K.T. Fang and D.K.J. Lin (2001). On isomorphism of factorial designs, *J. Complexity*, **17**, 86–97.
  - [161] Fang, K.T., Wang, S.G. and Wei, G. (2001), A stratified sampling model in spherical feature inspection using coordinate measuring machines, *Statist. & Prob. Letters*, **51**, 25–34.
  - [160] Liang, J.J., Fang, K.T., Hickernell, F.J. and Li, R.Z. (2000), Testing multivariate uniformity and its applications, *Math. Computation*, **70**, 337–355.
  - [159] Wang, Z. and Fang, K.T. (2000), Measures of uniformity for uniform designs with qualitative factors, *Application of Statistics and Management*, **19**, No.3, 28–32.
  - [158] Fang, K.T. and Lin, D.K.J. (2000), Theory and applications of the uniform design, *J. Chinese Statist. Assoc.*, **38(4)**, 331–352.
  - [157] Fang, K.T. and Ma, C.X. (2000), Applications of uniformity to factorial designs, *J. Chinese Statist. Assoc.*, **38(4)**, 441–464.
  - [156] Fang, K.T. and Ma, C.X. (2000), The usefulness of uniformity in experimental design, in *New Trends in Probability and Statistics*, Vol. 5, T.Kollo, E.-M. Tiit and Srivastava, M. Eds, TEV and VSP, The Netherlands, 51–59.
  - [155] Fang, K.T., Kollo, Tõnu, and Parring, A. M. (2000), Approximation of the non-null distribution of generalized  $T^2$ -statistics, *Linear Algebra and Its Appl.*, **321**, 27–46.
  - [154] Mukerjee, R., Chan, L.Y. and Fang, K.T. (2000), Regular fractions of mixed factorials with maximum estimation capacity, *Statistica Sinica*, **10** 1117–1132.
  - [153] Xu, Q.S., Liang, Y.Z. and Fang, K.T. (2000), The effects of different experimental designs on parameter estimation in the kinetics of a reversible chemical reaction, *Chemometrics and Intelligent Laboratory Systems*, **52**, 155–166.
  - [152] Fang, K.T., Fang, H. B. and von Rosen, D. (2000), A family of bivariate distributions with non-elliptical contours, *Communications in Statistics: Theory and Methods*, **29**, 1885–1898.

- [151] Liang, J. J. and Fang, K.T. (2000), Some applications of L  uter's technique in tests for spherical symmetry, *Biometrical J.*, **42**, No. 8, 923–936.
- [150] Fang, K.T., Geng, Z. and Tian, G.L. (2000). Statistical inference for truncated Dirichlet distribution and its application in misclassification, *Biometrical J.*, **42**, 1053–1068.
- [149] Pan, J.X., Fung, W.K., and Fang, K.T. (2000), Multiple outlier detection in multivariate data using projection pursuit techniques, *J. Statist. Planning and Inference*, **83** 153–167.
- [148] Fang, K.T. and R. Mukerjee (2000), A connection between uniformity and aberration in regular fractions of two-level factorials, *Biometrika* **87**, 193–198.
- [147] Fang, K.T., D.K.J. Lin, P. Winker and Y. Zhang (2000), Uniform design: Theory and Applications, *Technometrics*, **42**, 237–248.
- [146] Fang, K.T., Lin, D.K.J. and Ma, C.X. (2000), On the construction of multi-level supersaturated designs, *J. Statist. Plan. Infer.*, **86** 239–252.
- [145] Liang, J.J., Li, R., Fang, H. and Fang, K.T. (2000), Testing multinormality based low-dimensional projection, *J. Statist. Plan. Infer.*, **86** 129–141.
- [144] Xie, M.Y. and Fang, K.T. (2000), Admissibility and minimaxity of the uniform design in nonparametric regression model, *J. Statist. Plan. Inference*, **83** 101–111.
- [143] Fang, K.T. and Yang, Z.H. (2000), On uniform design of experiments with restricted mixtures and generation of uniform distribution on some domains, *Statist. & Prob. Letters*, **46**, (2), 113–120.
- [142] Fang, K.T., Ma, C.X. and Li. J.K. (1999), Recent development of orthogonal factorial designs and their applications (I) - applications of regression analysis to orthogonal designs, *Application of Statist. and Management*, **19** No 2, 44–49.
- [141] Fang, K.T., Ma, C.X. and Li. J.K. (1999), Recent development of orthogonal factorial designs and their applications (II) - uniformly orthogonal designs, *Application of Statist. and Management*, **19** No 3, 43–52.
- [140] Fang, K.T., Ma, C.X. and Li. J.K. (1999), Recent development of orthogonal factorial designs and their applications (III) - *D*-optimality of orthogonal designs, *Application of Statist. and Management*, **19** No 4, 43–52.
- [139] Fang, K.T., Ma, C.X. and Li. J.K. (1999), Recent development of orthogonal factorial designs and their applications (IV) - projection properties of orthogonal designs, *Application of Statist. and Management*, **19** No 5, 35–43.
- [138] Pan, J.X., Fang, K.T. and von Rosen, D. (1999), Bayesian local influence in growth curve model with unstructured covariance, *Biometrical J.*, **41**, 641–658.
- [137] Ma, C.X., Fang, K.T. and Liski, E. (1999), A new approach in constructing orthogonal and nearly orthogonal arrays, *Metrika*, **50** 255–268.
- [136] Pan, J. X. and Fang, K. T. (1999), Bayesian local influence in growth curve model with unstructured covariance, *Biometrical J.*, **41** 641–658.
- [135] Wu, R. and Fang, K.T. (1999), A risk model with delay in claim settlement, *Acta math. Appl. Sinica*, **15** 352–360.
- [134] Fang, K.T., Shiu, W. C. and Pan, J. X. (1999), Uniform designs based on Latin squares, *Statistica Sinica*, **9** 905–912.
- [133] Fang, K.T. and Li, R. Z. (1999), Bayesian statistical inference on elliptical matrix distributions, *J. Multivariate Anal.*, **70** 66–85.
- [132] Fang, K. T. and Zheng, Z. K. (1999), A two-stage algorithm of numerical evaluation of integrals in number-theoretic methods, *J. Comp. Math.*, **17**, 285–292.

- [131] Tian, G. L. and Fang, K. T. (1999), Uniform design for mixture-amount experiments and for mixture experiments under order restrictions, *Science in China, Ser. A*, **42**(5), 456-470.
- [130] Winker, P. and Fang, K.T. (1999), Randomness and quasi-Monte Carlo approaches, some remarks on fundamentals and applications in statistics and econometrics, *Jahrbücher für Nationalökonomie und Statistics*, **218**, 215-228.
- [129] Fang, K. T. and Liang, J. J. (1999), Tests of Spherical and elliptical symmetry, *Encyclopedia of Statistical Sciences*, **Update Vol. 3**, Wiley, New York, 686-691.
- [128] Tian, G. L. and Fang, K. T. (1998), Stochastic representation and uniform designs for mixture-amount experiments and for mixture experiments under order restrictions, *Science in China*, **28**(12), 1087-1101.
- [127] Fang, K. T., Liang, J. J. and Li, R. Z. (1998), A multivariate version of Ghosh's  $T_3$ -plot detect non-multinormality, *Computational Stat. and Data Analysis*, **28**, 371-386.
- [126] Zhang, L., Liang, Y. Z., Jiang, J. H., Yu, R. Q. and Fang, K.T. (1998), Uniform design applied to nonlinear multivariate calibration by ANN, *Analytica Chimica Acta*, **370** 65-77.
- [125] Pan, J. X., Fang, K. T. and D. von Rosen (1998), On the posterior distribution of the covariance matrix of the growth curve model, *Statist. & Prob. Letters*, **38**, 33-39.
- [124] Fang, K. T., Zheng, Z. and Lu, W. (1998), Discrepancy with respect to Kaplan-Meier estimator, *Commun. Statist.-Simula.*, **27**, 329-344.
- [123] Winker, P. and Fang, K. T. (1998), Optimal U-type design, in *Monte Carlo and Quasi-Monte Carlo Methods 1996*, eds. by H. Niederreiter, P. Zinterhof and P. Hellekalek, Springer, 436-448.
- [122] Zhang, L., Liang, Y. Z., Yu, R. Q., and Fang, K. T. (1997), Sequential number-theoretic optimization (SNT0) method applied to chemical quantitative analysis, *J. Chemometrics*, **11** 267-281.
- [121] Lee, A. W. M., Chan, W. F., Yuen, F. S. Y., Tse, P. K., Liang, Y. Z. and Fang, K. T. (1997), An example of a sequential uniform design: application in capillary electrophoresis, *Chemometrics and Intelligent Laboratory Systems*, **39**, 11-18.
- [120] Kotz, S., Fang, K. T. and Liang, J. J. (1997), On multivariate vertical density representation and its application to random number generation, *Statistics*, **30** 163-180.
- [119] Winker, P. and Fang, K. T. (1997), Application of Threshold accepting to the evaluation of the discrepancy of a set of points, *SIAM Numer. Analysis*, **34**, 2038-2042.
- [118] Zhu, L. X., Fang, K. T. and Bhatti, M. I. (1977), On estimated projection pursuit-type Cràmer-von Mises statistics, *J. Multivariate Analysis*, **63** 1-14.
- [117] Pan, J. X., Fang, K. T., and von Rosen, D. (1997), Local influence assessment in the growth curve model with unstructured covariance, *J. Statistical Planning and Inference*. **62** 263-278.
- [116] Zhu, L. X., Fang, K. T., and Li, R. Z. (1997), A new approach for testing symmetry of a high-dimensional distribution, *Bulletin of Hong Kong Math. Society*, **1**, 35-46.
- [115] Fang, K. T., Lam, P. C. B. and Wu, Q. G. (1997), Estimation for seemingly unrelated regression equations, *Statistics & Decisions* **15**, 183-189.
- [114] Fang, K. T. and Wang, Y. (1997), Number-theoretic methods, *Encyclopedia of Statistics*, **Update Vol. 2**, Wiley, New York, 993-998.
- [113] Fang, K. T. (1997), Elliptically contoured distributions, *Encyclopedia of Statistics*, **Update Vol. 1**, Wiley, New York, 212-218.
- [112] von Rosen, Fang, H. B. and Fang, K. T. (1997), An extension of the complex normal distribution, in *Advances in the Theory and Practice of Statistics: A volume in Honor of Samuel Kotz*, eds. by N. L. Johnson and N. Balakrishnan, Wiley, New York, 415-427.
- [111] Fang, K. T. and Li, R. Z. (1997), Some methods for generating both an NT-net and the uniform

- distribution on a Stiefel manifold and their applications, *Comput. Statist. and Data Anal.*, **24**, 29-46.
- [110] Li, R. Z., Fang, K. T. and Zhu, L. X. (1997), Some probability plots to test spherical and elliptical symmetry, *J. Computational and Graphical Statistics*, **6**, No. 4, 1-16.
  - [109] Chen, X.R., Fang, K.T., Zhang, R.C. and Zhu, L.X. (1997), Asymptotic on combination generators, *Science In China, (Series A)*, **27**, No.4, 289-297.
  - [108] Fang, K. T., Hickernell, F. J. and Winker, P. (1996), Some global optimization algorithms in statistics, in *Lecture Notes in Operations Research*, eds. by Du, D. Z., Zhang, X. S. and Cheng, K. World Publishing Corporation, 14-24.
  - [107] Liang, Y. Z. and Fang, K. T. (1996), Robust multivariate calibration algorithm based on least median squares and sequential number theoretic optimization method, *Analyst Chemistry*, **121** 1025-1029.
  - [106] Zhu, L. X. and Fang, K. T. (1996), Asymptotics for kernel estimate of sliced inverse regression, *Annals Statistics* **24** 1053-1068.
  - [105] Pan, J. X. and Fang, K. T. (1996), Detecting influential observations in growth curve model with unstructured covariance, *Comput. Statist. and Data Anal.*, **22** 71-87.
  - [104] Yang, Z. H., Fang, K. T., and Liang, J. J. (1996), A characterization of multivariate normal distribution and its application, *Statistics & Probability Letters*, **30** 347-352.
  - [103] Pan, J. X., Fang, K. T., and Liski, E. P. (1996), Bayesian local influence in the growth curve model with Rao's simple covariance structure. *J. Multivariate Analysis*, **58** 55-81.
  - [102] Wang, Y. and Fang, K. T. (1996), Uniform design of experiments with mixtures, *Science in China (Series A)*, **39** 264-275.
  - [101] Fang, K. T. and Hickernell, F.J. (1996), Discussion of the papers by Atkinson, and Bates *et al*, *J. R. Statist. Soc. B*, **58** 103.
  - [100] Chen, X.R., Zhu, L.X. and Fang, K.T. (1996), Almost sure convergence of weighted sums, *Statistica Sinica*, **6** 499-509.
  - [99] Shen, S. Y. and Fang, K.T. (1995), Neural computation on nonlinear regression analysis problems, *International J. Math. & Statist. Sciences*, **3**, (2), 155-178.
  - [98] Shiu, W. C., Ma, S. L., and Fang, K. T. (1995), On the rank of cyclic Latin squares, *Linear and Multilinear Algebra*, **40**, 183-188.
  - [97] Zhu, L. X., Fang, K. T., and Zhang, J. T. (1995), A projection NT-type test for spherical symmetry of a multivariate distribution, *New Trends in Probability and Statistics, Vol. 3 - Multivariate Statistics and Matrices in Statistics*, E - M Tiit, T. Kollo and H. Niemi eds, VSP - TEV, Utrecht, The Netherlands, 109 - 122.
  - [96] Zhu, L.X., Fang, K.T., Bhatti, M.I., and Bentler, P.M. (1995), Testing Sphericity of a high-dimensional distribution based on bootstrap approximation, *Pakistan J. Statistics*, **11**, 49-65.
  - [95] Fang, K. T. and Hickernell, F. J. (1995), The uniform design and its applications, *Bulletin of The International Statistical Institute, 50th Session, Book 1*, 339-349, Beijing.
  - [94] Fang, K. T. and Li, R.Z. (1995), Estimation of scatter matrix based on i.i.d. sample from elliptical distributions, *Acta Math. Appl. Sinica, (English Ser)* **11**, 405-412.
  - [93] Li, R.Z. and Fang, K.T. (1995), Estimation of scale matrix of elliptically contoured matrix distribution, *Statistics & Probability Letters*. **24**, 289-297.
  - [92] Wang, Y., Lin, D. K. and Fang, K.T. (1995), Designing outer array points, *J. Quality Technology*, **27**, 226-241.

- [91] Zhu, L.X., Wong, H.L., and Fang, K.T. (1995), A test for multivariate normality based on sample entropy and projection pursuit, *J. Statistical Planning and Inference*, **45** 373-385.
- [90] Pan, J. X. and Fang, K. T. (1995), Multiple outlier detection in growth curve model with unstructured covariance matrix, *Annals Institute of Statistical Mathematics*, **47** 137-153.
- [89] Fang, K. T. (1994), Uniform design 3-4, *Tactical Missile Technology*, No. 2, 56-69.
- [88] Fang, K. T. (1994), Uniform design 1-2, *Tactical Missile Technology*, No.1, 54-65.
- [87] Fang, K. T. (1994), Uniform design and its applications (4), *Application of Statistics and Management*, **13**. No. 4, 54-56.
- [86] Fang, K. T. (1994), Uniform design and its applications (3), *Application of Statistics and Management*, **13**. No. 3, 52-65.
- [85] Fang, K. T. (1994), Uniform design and its applications (2), *Application of Statistics and Management*, **13**. No. 2, 59-61.
- [84] Fang, K. T. (1994), Uniform design and its applications, *Application of Statistics and Management*, **13**. No. 1, 56-63.
- [83] Zhu, L. X. and Fang, K. T. (1994), The accurate distribution on the Kolmogorov statistic with applications to bootstrap approximation, *Advance in Applied Mathematics*, **15** 476-489.
- [82] Fang, K. T. and Li, J. K. (1994), Some new results on uniform design, *Chinese Science Bulletin*, **21** 1921-24, English version in **40** 268-272, 1995.
- [81] Fang, K.T., Bentler, P.M. and Yuan, K.H. (1994), Applications of number-theoretic methods to quantizers of elliptically contoured distributions, *Multivariate Analysis and Its Applications, IMS Lecture Notes - Monograph Series*, 211-225.
- [80] Fang, K.T., Wang, Y. and Bentler, P.M. (1994), Some applications of number-theoretic methods in statistics, *Statistical Science*, **9** 416-428.
- [79] Zheng, Z. and Fang, K.T. (1994), On Fisher's bound for stable estimators with extension to the case of Hilbert parameter space, *Statistica Sinica*. **4** 679-692.
- [78] Fang, K.T. and Zhang, J.T. (1993), A new algorithm for calculation of estimates of parameters of nonlinear regression modeling, *Acta Math. Appl. Sinica*, **16**, 366-377.
- [77] Fang, K.T. and Wei, G. (1993), The distribution of a class the first hitting time, *Acta Math. Appl. Sinica*, **15** 460-467.
- [76] Fang, K.T., Zhu, L.X. and Bentler, P.M. (1993), A necessary test of goodness of fit for sphericity, *J. Multivariate Analysis*, **45** 34-55.
- [75] Fang, K.T. and Yuan K.H. (1993), The limiting distributions of some subclasses of the generalized non-central t-distributions, *Acta Math. Appl. Sinica(English Ser.)*, **9**, 71-81.
- [74] Zhu, L.X., and Fang, K.T. (1992), On projection pursuit approximation for nonparametric regression, in *Order Statistics and Nonparametrics: Theory and Applications*, eds by Sen, P.K. and Salama, I.A., Elsevier Science Publishers, 455-469.
- [73] Fang, K.T. and Wang, Y. (1992), Applications of Quasi random Sequence in Statistics, in *Proceedings of Asian Mathematical Conference 1990* eds by Li, Z. et al, World Scientific, Singapore, 135-139.
- [72] Fang, K.T., Yuan, K.H. and Bentler, P.M.(1992), Applications of sets of points uniformly distributed on sphere to test multinormality and robust estimation, in *Probability and Statistics*, eds by Jiang, Z.P. et al, World Scientific, Singapore, 56-73.
- [71] Li, G. and Fang, K.T. (1992), The Ramanujan's q-extension of the exponential function and statistical distributions, *Acta Math. Appl. Sinica, (English Ser.)*, **8**, 264-280.

- [70] Fang, K.T., Kotz, S. and Ng, K.W. (1992), On the  $L_1$ -norm distributions in  $L_1$ -Statistical Analysis and Related Methods Y. Dodge ed., 401-413, Elsevier Science Publishers, North Holland, Amsterdam.
- [69] Fang, K.T. and Zhen, H.N. (1992), A maximum symmetric differences principle and its applications in uniform design, *Chinese J. Appl. Prob. Stat.*, **8**, 10-18.
- [68] Wang, Y. and Fang, K.T. (1992), A sequential number-theoretic methods for optimization and its applications in statistics, in *The Development of Statistics: Recent Contributions from China*, 139-156, Longman, London.
- [67] Anderson, T.W. and Fang, K.T. (1992), Theory and Applications elliptically contoured and related distributions, in *The Development of Statistics: Recent Contributions from China*, 41-62, Longman, London.
- [66] Wang, S.R., Chen X.R. and Fang, K.T. (1992), Statistics in China: a brief account of the past and present, in *The Development of Statistics: Recent Contributions from China*, 1-6, Longman, London.
- [65] Liu, S.S.M., Chan, A.K.K. and Fang, K.T. (1991), Evaluation of the promotional tactics for pharmaceuticals in Hong Kong, *Hong Kong Manager*, **27**, No.6, 16-19.
- [64] Fang, K.T. and Wang, Y. (1991), A sequential algorithm for solving a system of nonlinear equations, *J. Computational Math.* **9**, 9-16.
- [63] Fang, K.T. and Bentler, P.M. (1991), A Largest characterization of spherical and related distributions, *Statistics & Probability Letters*, **11**, 107-110.
- [62] Fang, K.T. and Wang, Y. (1990), A sequential algorithm for optimization and its applications to regression analysis, in *Lecture Notes in Contemporary Mathematics* (L. Yang and Y. Wang ed), 17-28, Science Press, Beijing.
- [61] Fang, K.T. and Yuan K.H. (1990), A unified approach to maximum likelihood estimation, *Chinese J. Appl. Prob. Stat.*, **7**, 412-418.
- [60] Wang, Y. and Fang, K.T. (1990), Number theoretic method in applied statistics (II), *Chinese Annals of Math. Ser. B*, **11**, 384-394.
- [59] Wang, Y. and Fang, K.T. (1990), Number theoretic method in applied statistics, *Chinese Annals of Math. Ser. B*, **11**, 41-55.
- [58] Wang, Y. and Fang, K.T. (1989), The number theoretic method in applied statistics, *J. Sichuan University Natural Science Edition*, **26**, Special Issue, 86-89.
- [58] Fang, K.T. and Liang, J.J. (1989), Inequalities for the partial sums of elliptical order statistics related to genetic selection, *The Canadian J. Statistics*, **17**, 439-446.
- [57] Quan, H., Fang, K.T. and Teng, C.Y. (1989), The applications of information function for spherical distributions, *Northeastern Math. J.*, **5**, 27-32.
- [56] Fang, K.T. and Fang B.Q. (1989), A characterization of multivariate  $l_1$ -norm symmetric distributions, *Statistics & Probability Letters*, **7**, 297-299.
- [55] Fang, K.T. and Xu, J.L. (1989), A class of multivariate distributions including the multivariate logistic, *J. Math. Research and Exposition*, **9**, 91-100.
- [54] Xu, J.L. and Fang, K.T. (1989), Expected values of zonal polynomials of spherical matrix distributions, *Acta Math. Appl. Sinica (English Ser.)*, **5**, 6-14.
- [53] Fang, K.T. and Fang, B.Q. (1988), Generalized symmetrized Dirichlet Distributions, *Acta Math. Appl. Sinica, (English Ser.)*, **4**, 316-323.
- [52] Fang, K.T. and Fan, J.Q. (1988), Large sample properties for distributions with rotational symmetries, *Northeastern Math. J.*, **4**, 379-388.

- [51] Fang, K.T. and Fang, B.Q. (1988), A class of generalized symmetric Dirichlet distributions, *Acta Math. Appl. Sinica (English Ser.)*, **4**, 316-322.
- [50] Fang, B.Q. and Fang, K.T. (1988), Maximum likelihood estimates and likelihood ratio criteria for location and scale parameters of the multivariate  $l_1$ -norm symmetric distributions, *Acta Math. Appl. Sinica (English Series)*, **4**, 13-22.
- [49] Fang, K.T. and Fang, B.Q. (1988), Families of Exponential matrix distributions, *Northeastern Math. J.*, **4**, 16-28.
- [48] Fang, K.T., Xu, J.L. and Teng, C.Y. (1988), Likelihood ratio criteria testing hypotheses about parameters of a class of elliptically contoured distributions, *Northeastern Math. J.*, **4**, 241-252.
- [47] Fang, B.Q. and Fang, K.T. (1988), Distributions of order statistics of multivariate  $l_1$ -norm symmetric distribution and Applications, *Chinese J. Appl. Prob. Stat.*, **4**, 44-52.
- [46] Fang, K.T. and Fang, B.Q. (1988), Some families of multivariate symmetric distributions related to exponential distribution, *J. Multivariate Analysis*, **24**, 109-122.
- [45] Fan, J.Q. and Fang, K.T. (1987), Maximum likelihood character of distributions, *Acta Math. Appl. Sinica, (English Ser.)*, **3**, 358-363.
- [44] Fang, K.T. and Chen, Q.Y. (1987), Discussion on probability method in Statistics, *Mathematical Statistics & Applied Probability*, **2**, 355-368.
- [43] Fan, J.Q. and Fang, K.T. (1987), Inadmissibility of the usual estimator for location parameters of spherically symmetric distributions, *Chinese Science Bulletin*, **32**, 1361-1364, in English Ser., **34**, 533-537.
- [42] Quan, H. and Fang, K.T. (1987), Unbiasedness of some testing hypotheses in elliptically contoured population, *Acta Mathematicae Applicatae Sinica*, **10**, 215-234.
- [41] Fang, K.T., Fan, J.Q. and Xu, J.L. (1987), The distributions of quadratic forms of random matrix and applications, *Chinese J. Appl. Prob. Stat.*, **3**, 289-297.
- [40] Fang, K.T. and Xu J.L. (1987), The Mills' ratio of multivariate normal distributions and spherical distributions, *Acta Mathematicae Sinica*, **30**, 211-220.
- [39] Zhang, H.C. and Fang K.T. (1987), The distributions of normal matrix variate distribution, *J. Graduate School*, **4**, 22-30.
- [38] Anderson, T.W. and Fang, K.T. (1987), On the Theory of multivariate elliptically contoured distributions, *Sankhya*, **49, Series A**, 305-315.
- [37] Zhang, H.C. and Fang, K.T. (1987), Some properties of left-spherical and right-spherical matrix distributions. *Chinese J. Appl. Prob. Stat.* **3**, 97-105.
- [36] Fang, K.T. (1987), A review: on the theory of elliptically contoured distributions, *Advance in Mathematics*, **16**, 1-15.
- [35] Fang, K.T. and Chen, H.F. (1986), On the spectral decompositions of spherical matrix distributions, and some of their subclasses, *J. Math. Res. & Exposition*, No.14, 147-156.
- [34] Anderson, T.W., Fang, K.T. and Hsu, H. (1986), Maximum likelihood estimates and likelihood ratio criteria for multivariate elliptically contoured distributions, *The Canadian J. Stat.*, **14**, 55-59.
- [33] Fang, K.T. and Xu, J.L. (1986), The direct operations of symmetric and lower-triangular matrices with their applications, *Northeastern Math. J.*, **2**, 4-16.
- [32] Fang, K.T. and Xu, J.L. (1985), Likelihood ratio criteria testing hypotheses about parameters of elliptically contoured distributions, *Math. in Economics*, **2**, 1-9.
- [31] Fan, J.Q. and Fang, K.T. (1985), Inadmissibility of sample mean and regression coefficients for elliptically contoured distributions, *Northeastern Math. J.*, **1**, 68-81.

- [30] Zhang, Y., Fang, K.T. and Chen, H.F. (1985). On matrix elliptically contoured distributions, *Acta Math. Scientia*, **5**, 341-353.
- [29] Fan, J.Q. and Fang, K.T. (1985), Minimax estimator and Stein Two-stage estimator of location parameters for elliptically contoured distributions, *Chinese J. Appl. Prob. Stat.*, **1**, 103-114.
- [28] Fang, K.T. and He, S.D. (1985), Regression models with linear constraints and nonnegative regression coefficients, *Math. Numer. Sinica*, **7**, 237-246.
- [27] Fang, K.T. (1985), Occupancy problems, *Encyclopedia of Statistical Sciences*, Vol. 6 (ed. by Kotz, S., Johnson, N.L. and Read, C.B.), 402-406, Wiley.
- [26] Fang, K.T. and Wu, Y.H. (1984), Distributions of quadratic forms and generalized Cochran's Theorem, *Math. in Economics*, **1**, 29-48.
- [25] Fang, K.T. and He, S.D. (1984), The problem of selecting a given number of representative points in a normal population and a generalized Mills' ratio, *Acta Math. Appl. Sinica*, **7**, 293-306.
- [24] Fang, K.T. (1984), Theory of majorization and its applications, *Appl. Math. & Math. Computation*, No.5, 75-86.
- [23] Fang, K.T. (1984), Some further applications of finite difference operators, *Appl. Math. & Math. Computation*, No. 4, 22-32.
- [22] Fang, K.T. and Chen, H.F. (1984), Relationships among classes of spherical matrix distributions, *Acta Mathematicae Applicatae Sinica (English Series)*, **1**, 139-147.
- [21] Fang, K.T. and Niedzwiecki, D. (1983), A unified approach to distributions in restricted occupancy problem, *Contributions to Statistics, Essays in Honour of Professor Norman Lloyd Johnson*, (ed. by P.K. Sen), 147-158, North - Holland.
- [20] Fang, K.T. (1982), Equivalence between Fisher discriminant model and regression model, *Kexue Tongbao (Chinese Science Bulletin)*, **27**, 803-806.
- [19] Fang, K.T. (1982), A restricted occupancy problem, *J. Appl. Prob.*, **19**, 707-711.
- [18] Fang, K.T., Wang, D.Q. and Wu, G.F. (1982), A class of constrained regression-programming regression, *Mathematicae Numerica Sinica*, **4**, 57-69.
- [17] Fang, K.T. and Ma, F.S. (1982), Splitting in cluster analysis and its applications, *Acta Math. Appl. Sinica*, **5**, 339-534.
- [16] Fang, K.T. and Sun, S.G. (1982), Discriminant analysis by distance, *Acta Mathematicae Applicatae Sinica*, **5**, 145-154.
- [15] Fang, K.T. (1982), Some clustering methods for a set of ordered observations, *Acta Mathematicae Applicatae Sinica*, **5**, 94-101.
- [14] Wang, L.H., Fang, K.T. and Zeng, Y.Y. (1981), An application of Bayes discriminant analysis in determining the systematic position of gigantopithecus, *Vertebrata Palasiatica*, **19**, 269-275.
- [13] Fang, K.T. (1981), Graph analysis of multivariate observations, *Mathematics in Practice and Theory*, 63-71 (No.3) and 42-48 (No.4).
- [12] Fang, K.T. (1981), The Limiting distribution of linear permutation statistics and its applications, *Acta Mathematicae Applicatae*, **4**, 69-82.
- [11] Wang, Y. and Fang, K.T. (1981), A note on uniform distribution and experimental design, *Kexue Tongbao (Chinese Science Bulletin)*, **26**, 485-489.
- [10] Bai, Z.D. and Fang, K.T., et al. (1980), a problem on independence of random variables, *Special Issue of Kexue Tongbao (Chinese Science Bulletin)*, 90-92.
- [9] Fang, K.T. (1980), Experimental design by uniform distribution, *Acta Mathematicae Applicatae Sinica*, **3**, 363-372.

- [8] Fang, K.T. and Wu, C.Y. (1979), The extreme value problem of some probability functions, *Acta Mathematicae Applicatae Sinica*, **2**, 132-148.
- [7] Fang, K.T. (1978), Clustering analysis, *Mathematics in Practice and Theory*, **4**, 66-80 (No.1) and 54-62 (No.2).
- [6] Liu, C.W. and Fang, K.T. (1977), Yates' algorithm and its application in  $2^n$ -type orthogonal array, *Mathematics in Practice and Theory*, No.3, 9-18.
- [5] Sun, S.G. and Fang, K.T. (1977), The test for additional information in multivariate analysis, *Acta Mathematicae Applicatae Sinica*, **3**, 81-91.
- [4] Fang, K.T. (1976), Application of the theory of the conditional distribution for making the standardization of clothes, *Acta Mathematicae Applicatae Sinica*, **2**, 62-74.  
 Liu, C.W. and Fang, K.T. (1976), How to use probability papers (I), *Mathematics in Practice and Theory*, No.3, 49-55.  
 Liu, C.W. and Fang, K.T. (1976), How to use statistical papers (II), *Mathematics in Practice and Theory*, No.4, 55-61.
- [3] Fang, K.T. and Liu, C.W. (1976), The use of range in analysis of variance, *Mathematics in Practice and Theory*, No.1, 37-51.
- [2] Fang, K.T. (1972), An introduction to some nonparametric statistical methods, *Mathematics in Practice and Theory*, **5**, 58-66.
- [1] Fang, K.T., Dong, Z.Q., and Han, J.Y. (1965), The structure of stationary and without after-effect queue, *Acta Mathematicae Applicatae and Computation Sinica*, **2**, 84-90.

#### **Invited/Keynote Speaker in International Conference:**

- [56] What I learnt from P.L. Hsu, as an Invited talk in the Pao-Lu Hsu's memorial invited session, The Joint Statistical Meeting, Miami, USA, July 30 – August 4, 2011.
- [55] Statistics culture and statistical education, as a Distinguished Lecture invited by the Xian University of Finance and Economics, May 20, 2011.
- [54] Statistics' Charisma, as a Distinguished Lecture invited by Sun Yat-sen University. April 8, 2011.
- [53] Remarks on The Discrepancy in Experimental Designs with Yongdao Zhou, *The Eighth ICSA International Conference*, November 22, 2010, Guangzhou.
- [52] A Challenge Research Direction in Biostatistics - Chinese Medicine, One of three Plenary Talks in *First Joint Biostatistics Symposium*, 17-18 July 2010, Beijing.
- [51] What I learnt from P.L. Hsu, an Invited talk in *Probability and Statistics: an international conference in honor of Professor P.L. Hsu's 100th birthday*, 5-7 July, 2010, Beijing.
- [50] Additive Logistic Elliptical Distributions, as an Invited talk in *The 9th International Workshop on Matrices and Statistics*, 5-8 June, 2010, Shanghai, China.
- [49] Statistics simulation on a geometric probability problem, *2009 Symposium on Experimental Design*, 17-19 July, 2009, Guangzhou, China.
- [48] A note on statistics simulation on a geometric probability problem, *The 10th Symposium on The Uniform Design, and 2009 Xian Symposium on Applied Statistics*, 13-17 July, 2009, Xian, China
- [47] Multivariate analysis and its development, an invited talk in *Recent Developments in Statistics and Their Applications In Memory of Professor Yao-Ting Zhang*, 20-22 June, 2008, Wuhan, China.
- [46] Recent development in the uniform experimental design, a Plenary Talk in *2006 International Conference on Design of Experiments and Its Applications*, July 9-13, 2006, Nankai University, Tianjin, China.

- [45] Balance and uniformity, a Plenary Talk in *International Statistics Conference: Statistics in the Technological Age*, 27-31 December, 2005, Kuala Lumpur.
- [44] Modeling Techniques in the uniform design, in *2005 International Symposium on the Uniform Experimental Design*, 19-23 August, Jizhou, Hunan Province, China.
- [43] Uniform Design and its Recent development, a special invited lecture, in *The joint Meeting of Chinese Society of Probability and Statistics and the Institute of Mathematical Statistics*, July 9 - 12, 2005, Beijing.
- [42] Recent Development in the uniform experimental design, a keynote speech in *International Symposium on Frontier Problems in Statistics*, July 6-8, 2005, Beijing.
- [41] Uniform design in computer and physical experiments, a keynote speech in *International Workshop on The Grammar of Technology Development*, January 17-18, 2005, Tokyo, Japan.
- [40] Multivariate analysis in chemistry, in *International Conference on the Future of Statistical Theory, Practice and Education*, December 29, 2004 - January 1, 2005, Hyderabad, India.
- [39] Physical experiments with model unknown, in *International Conference on the Future of Statistical Theory, Practice and Education*, December 29, 2004 - January 1, 2005, Hyderabad, India.
- [38] Number-theoretic methods in experimental designs, forty-five-minute talk in *The third International Congress of Chinese Mathematicians*, December 17-20, Hong Kong.
- [37] Discrepancy in experimental designs, in *International Workshop on Applied Mathematics and Statistics*, December 16, 2004, Hong Kong.
- [36] Accuracy and similarity of fingerprints, in *The International Conference on Chemometrics and Bioinformatics in Asia (CCBA2004)*, 16-20 October, 2004, Shanghai.
- [35] Lower bounds of wrap-around and centered  $L_2$ -discrepancies and construction of uniform designs, *International Conference on Design of Experiments*, July 25-28, 2004, Beijing.
- [34] Data Science: multivariate analysis and data mining and applications, as a keynote speaker in *International Conference on Random Walks, Sequential Analysis and Related Topics*, 18-19 July 2004, Shanghai.
- [33] Applications of majorization theory in experimental design, *2003 Experimental Design Workshop in Taipei*, December 22-24, 2003, Taipei.
- [32] Uniform experimental design and its applications to industry and computer experiments, *International Conference on Recent Developments in Theoretical and Applied Statistics*, Tamsui, Taiwan, **Keynote Speech**, December 15-16, 2003.
- [31] A review on: theory, method and applications of the uniform design, *2003 Symposium on The Uniform Experimental Design*, 2-5 December, 2003, Shenzhen.
- [30] Recent development of theory of the uniform design and its applications, a 45 minute talk in *The Ninth Annual Meeting of The Chinese Society of China*, 30 October - 2 November, 2003, Wuhan.
- [29] The uniform experimental design in the twenty first centenary, *Management Forum on The Six Sigma in Anhui Province*, **Keynote Speech**, 29-30 September, 2003, Hefei, Anhui, China.
- [28] An introduction to the uniform design for industrial experiments with model unknown, Lecture invited by the Hong Kong Society of Quality, 29 August, 2003.
- [27] Statistical models for space filling designs and optimalities of uniform designs, The 5th International Conference on MCQMC, Singapore, November 25-28, 2002.
- [26] Data Mining in Chinese Medicine and Chemistry, Taipei Data Mining Conference 2002, **Keynote Speech**, November 15, 2002.
- [25] Experimental designs when model is unknown, The 2002 Taipei International Statistical Symposium and Bernoulli Society EAPR Conference, Taipei, July 7-10, 2002.

- [24] Experimental designs for computer experiments and for industrial experiments with model unknown, a Keynote speech, at the 2002 The Korean Statistical Association Conference, Daejeon, Korea, May 24, 2002 (Keynote Speaker).
- [23] Applications of uniform design in industry and computer experiments, The 6th Conference of Chinese Association of Applied Statistics, Hefei, Anhui, China, October 12–15, 2001.
- [22] Uniform design for simulation experiments, *The 50th Gordon Research Conference: the Statistics in Chemistry & Chemical Engineering*, July 22–27, 2001, in Williams College, Massachusetts, U.S.A. with one hour and forty minutes discussion.
- [21] Aspects of copula analysis for construction of multivariate distributions for given marginals, *International Conference Celebrating 80th Birthday of Professor C.R.Rao*, organized by Indian Statistical Institute, December 29 - 31 2000.
- [20] Optimal supersaturated design of mixed levels, *Fourth International Triennial Calcutta Symposium on Probability and Statistics*, December 28 - 28 2000 in Calcutta, an invited talk in “R.C. Bose Memorial Session”.
- [19] Applications of Quasi-Monte Carlo methods in statistics, *The Fourth Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing*, November 27- December 1, 2000.
- [18] Connections and comparisons between uniform design and orthogonal design, *Symposium on Theory of Uniform Design and Its Applications*, October 26-29, 1999.
- [17] Centered  $L_2$ -discrepancy of random sampling and Latin hypercube design, and construction of uniform design, *Workshop on the Complexity of Multivariate Problems*, October 4-8, 1999, Hong Kong.
- [16] The Usefulness of uniformity in Experimental Design” at *The 6th Tartu Conference on Multivariate Statistics*, August 19-23, 1999, Tartu, Estonia.
- [15] Multivariate Analysis in Large Number of Variables, half day invited lecture in *Statistical methods for Image Processing*, August 6-9, 1999, Uppsala, Sweden
- [14] Orthogonality and  $D$ -optimality, 1998 Taipei International Statistical Symposium, August 1998, Taipei.
- [13] The usefulness of uniformity over the domain in experimental design, *Experimental Design Workshop*, May 1997, Hong Kong.
- [12] Bayesian statistical inference on elliptical matrix distributions, *1997 International Symposium on Contemporary Multivariate Analysis and Its Applications*, May 1997, Hong Kong.
- [11] Some global optimization algorithms in statistics, *Operations Research and Its Applications, Second International Symposium*, ISORA’96, December 1996, Guilin, China.
- [10] Number-theoretic methods in multivariate statistical tests, *1996 Joint Statistical Meeting, American Statistical Association*, August 1996, Chicago, U. S. A.
- [9] Multivariate analysis and its applications in elliptically contoured distributions, *Annual Meeting of the German Region of the International Biometric Society*, **Keynote Speech**, March 1996 Magdeburg, Germany.
- [8] The uniform design and its recent development (with F. J. Hickernell, *Workshop on Quasi-Monte Carlo Methods and Their Applications*, Dec. 1995 Hong Kong Baptist University, Hong Kong.
- [7] The uniform design and its applications (with F. J. Hickernell), *The 50th Session of International Statistical Institute (ISI)*, August 1995 Beijing, China.
- [6] A projection NT-type test for spherical symmetry of a Multivariate distribution (with Zhu, L. X. and Zhang, J. T.), *International Conference on Multivariate Analysis*, 1994, Tartu, Estonia.

- [5] A brief review of  $L_1$ -norm distributions(with Kotz, S. and Ng, K.W.), *The Second International Conference on Statistical and Applications* August 1992, Neuchatel, Switzerland.
- [4] Applications of number-theoretic methods in multivariate analysis (with Wang, Y. and Bentler, P.M.), *The International Symposium on Multivariate Analysis and Its Applications*, March 1992, Hong Kong.
- [3] On Hall's methods for projection pursuit regression(with Zhu, L.X.) *The Order Statistics and Nonparametrics: Theory and Applications* December 1991, Alexandria.
- [2]. Quantizers and Representative Points of Elliptically Contoured Distributions (with Yuan, K.H. and Bentler, P.M.), *The First Conference On Recent Developments in Statistical Research*, December 1990, Hong Kong.
- [1]. Applications of Quasi random Sequence in Statistics (with Wang Yuan), *The Asian Mathematical Conference*, August, 1990, Hong Kong.

### Contributed Speaker at International Conference:

- [33] Fang, K.T. (2005), Lower bounds of various criteria in experimental designs, International Conference on Design of Experiments :Theory and Applications, May 13 - 15, 2005, Memphis.
- [32] Fang, K.T. (2002), Theory and method of the uniform designs, Eighth ISSAT International Conference Reliability and Quality in Design, August 7-9, 2002, Anaheim, California, USA
- [31] Fang, K.T. (2000), The uniformity – a useful criterion in experimental design, *First Midwest Conference for New Directions in Experimental Design*, May 2000, Columbus, Ohio.
- [30] Fang, K.T. (2001), Construction of uniform designs and Latin hypercube designs, in *The 5th ICOSA Conference*, August, 2001, Hong Kong.
- [29] Fang, K.T. (1998), Theory and applications of the uniform design, *Experimental Design: Theory and Application*, November 1998, Oberwolfach, Germany.
- [28] Xie, M. Y. and Fang, K. T. (1997), Optimal designs of product wavelet regression models, *Experimental Design Workshop*, May 1997, Hong Kong.
- [27] Tian, G. L. and Fang, K. T. (1997), Generation of the uniform distributions of some domains and applications, *Experimental Design Workshop*, May 1997, Hong Kong.
- [26] Xie, M. Y. and Fang, K. T. (1997), Admissibility and minimaxity of the uniform design measure in nonparametric regression models, *1997 International Symposium on Contemporary Multivariate Analysis and Its Applications*, May 1997, Hong Kong.
- [25] Fang, H. B., Fang, K. T., Li, R. Z. and Liang, J. J. (1997), New noncentral  $t$ - and  $F$ -distributions for high-dimensional mean test, *1997 International Symposium on Contemporary Multivariate Analysis and Its Applications*, May 1997, Hong Kong.
- [24] Liang, J.J., Li, R. Z. and Fang, K. T. (1997), A multivariate version of Ghosh's  $T_3$ -plot to detect non-multinormality, *1997 International Symposium on Contemporary Multivariate Analysis and Its Applications*, May 1997, Hong Kong.
- [23] Teng, C. Y. and Fang, K. T. (1997), Statistical analysis based on normal distribution of quaternion, *1997 International Symposium on Contemporary Multivariate Analysis and Its Applications*, May 1997, Hong Kong.
- [22] Tian, G. L. and Fang, K. T. (1997), Multivariate Laplace distributions, *1997 International Symposium on Contemporary Multivariate Analysis and Its Applications*, May 1997, Hong Kong.
- [21] Xie, M. Y. and Fang, K. T. (1995), Orthogonality of the uniform type design under general Fourier regression models, presented in *International Workshop on Quasi-Monte Carlo Methods and Their*

- Applications* , Hong Kong.
- [20] Winker, P. and Fang, K. T. (1995), Generation of uniform design by threshold accepting, presented in *International Workshop on Quasi-Monte Carlo Methods and Their Applications* , Hong Kong.
  - [19] Shi, P. and Fang, K. T. (1995), Optimal U-designs under multi-criteria for Fourier regression models, presented in *International Workshop on Quasi-Monte Carlo Methods and Their Applications* , Hong Kong.
  - [18] Liang, Y. Z. and Fang, K. T. (1995), A new robust multivariate calibration algorithm based on least median squares and sequential number-theoretic optimization method, presented in *International Workshop on Quasi-Monte Carlo Methods and Their Applications* , Hong Kong.
  - [17] Li, W. and Fang K. T. (1995), A global optimum algorithm on two factor uniform design, presented in *International Workshop on Quasi-Monte Carlo Methods and Their Applications* , Hong Kong.
  - [16] Pan, J. X., Fang, K. T., and E. P. Liski, Bayesian local influence in growth curve model with Rao's simple covariance structure, presented in *The Third Conference of International Chinese Statistical Association*, Beijing, China, August, 1995.
  - [15] Shiu, W. C., Ma, S. L., and Fang, K. T., On The Rank of Cyclic Latin Squares, presented in *The Third Conference of International Chinese Statistical Association*, Beijing, China, August, 1995.
  - [14] Fang, K. T. , Shiu, W. C., and Pan, J. X., Uniform Design Based on Latin Square, presented in *The Third Conference of International Chinese Statistical Association*, Beijing, China, August, 1995.
  - [13] Kotz, S., Fang, K. T. and Liang, J. J. (1995), On multivariate vertical density representation and its application to random number generation, *Algebraic Methods in Multivariate Statistical Analysis*, Oberwolfach, Germany.
  - [12] Pan, J. X. and Fang, K. T. (1994), Multiple outlier detection in growth curve model with unstructured covariance matrix, *The Fifth Japan-China Symposium on Statistics*, Okayama, Japan.
  - [11] Zhu, L. X., Fang, K. T., and Li, R. Z. (1994), A projection NT-type test of multinormality based on the skewness and kurtosis indices, *The 15th Nordic Conference of Mathematical Statistics*, Lund, Sweden.
  - [10] Fang, K.T. et al, (1990), Distribution fitting the women's first marriage, first birth and second birth, *The International Seminar on In-Depth Fertility Survey*, Beijing.
  - [9] Fang, K.T. and Wei, G. (1989), Applications of number Theoretic methods in a geometric probability, *The Third Japan-China Symposium on Statistics*, Contributed Papers, Tokyo.
  - [8] Fang, K.T. and Yuan, K.H. (1989), The limiting distribution of some subclasses of the generalized non-central t-distribution, *The Third Japan- China Symposium on Statistics*, Contributed Papers, Tokyo, 46-49.
  - [7] Fang, K.T. (1988), Construction and applications of multivariate and related distributions, *Anal Meeting of the Psychometric Society*, UCLA, U.S.A.
  - [6] Xu, J.L. and Fang, K.T. (1987), The expected values of zonal polynomials of elliptically contoured distributions, *Sino-American Statistical Meeting*, Contributed Papers, Beijing, China, 531-534.
  - [5] Fan, J.Q. and Fang, K.T. (1987), Inadmissibility of the usual estimator for the location parameters of spherically symmetric distributions, *Sino-American Statistical Meeting*, Contributed Papers, Beijing, China, 143-146.
  - [4] Fang, K.T. and Fang, B.Q. (1987), Generalized symmetrized Dirichlet distributions, *Sino-American Statistical Meeting*, Contributed Papers, Beijing, China, 155-158.
  - [3] Fang, K.T. and Fang, B.Q. (1986), A new Family of multivariate exponential distributions, *Japan-China Symposium on Statistics*, Fukuoka, 57-60.

- [2] Fang, K.T., Wu, Y.H. and Chen, H.F. (1984), Spherical matrix distributions, generalized Bartlett decomposition and Cochran's theorem, *China-Japan Symposium on Statistics*, Beijing, 75-79.
- [1] Anderson, T.W. and Fang, K.T. (1984), Cochran's theorems for elliptically contoured distributions, *China-Japan Symposium on Statistics*, Beijing, 4-7.