CURRICULUM VITAE

Tonghui (Tony) Wang

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Education

Dec. 1992	Ph.D. in Statistics, University of Windsor, Canada.
Aug. 1988:	M. Sc. in Statistics, University of Windsor, Canada.
Jan. 1982:	B. Sc. in Mathematics, Northwest University, China.

Academic Positions

- 01/2021 - present: Dr. John A. and Margy Papen Endowed Professor of Actuarial Science, NMSU
- 07/2022 - 12/2022: Visiting Professor, Sydney University, Australia
- 08/2007 - Present: Professor, New Mexico State University, USA.
- 07/2022 - 11/2022: Visiting Professor, Sydney University, Australia
- 08/2000 - 07/2007: Associate Professor, New Mexico State University, USA.
- 08/1994 - 07/2000: Assistant Professor, New Mexico State University, USA.
- Summer 2023: Visiting Chair Professor: Xian Technological University, Xian, China.
- Summer 2023: Visiting Professor: Qingdao University, Qingdao, China; Shenzhen Technology University, Shenzhen, China; Zhenjiang University of Finance and Economy, Hongzhou, China; Shaanxi University of Science and technology, Xian, China; Shanxi Normal University, Northwest A & F University, Yangling, China; Northwest University, Xian, China.
- December 2019 - January 2020: Visiting Professor, King Mongkut University of Technology North Bangkok, Thailand; Chiang Mai University, Thailand; and Banking University, Vietnam.
- Summer 2019: Visiting Chair Professor: Northwest University, Xian, China and Northwest A and F University, Yangling, China.

- Summer 2019: Visiting professor: Xian Technological University, Xian, China; Zhenjiang University of Finance and Economy, Hongzhou, China; Shandong University of Finance and Economy, Jinan, China; Hongzhou Dianzi University, Hangzhou, China; Nanjing University of Information Technology, Nanjing, China; Inner Mongolia Agriculture University, Huhehot, China; and Lanzhou University of Finance and Economy, Lanzhou, China.

- December 2018 - January 2019: Visiting professor, King Mongkut University of Technology North Bangkok, Thailand; Chiang Mai University, Thailand; and Banking University, Vietnam.

- Summer 2018: Visiting Chair Professor: Shaanxi University of Science and technology, Xian, China and Northwest A and F University, Yangling, China.

- Summer 2018: Visiting Professor: Xian University of Science and Technology, Xian, China; Northwest University, Xian, China; Xian, Changan University, Xian China; Southwest University of Finance and Economics, Chengdu, China; Zhenjiang University of Finance and Economy, Hongzhou, China; Hangzhou Dianzi University, Hangzhou, China; Shanghai University of Finance and Economy, Shanghai, China; Donghua University, Shanghai, China; Nanjing University of Information Technology, Nanjing, China; and Lanzhou University of Finance and Economy, Lanzhou, China.

- Summer 2018: Visiting Professor, National Chengchi University, Taiwan and Institute of Statistics, Academia Sinica, Taiwan.

- Summer 2017: Visiting Professor: Shaanxi Normal University, Xian, China; Xian Polytechnic University, Xian, China; Northwest University, Xian, China; Shaanxi University of Science and Technology, Xian, China; Northwest A and F University, Yangling, China; Southwest University of Finance and Economics, Chengdu, China; and Inner Mongolia Agriculture University, Huhehot, China.

- Jan. 2017: Visiting Professor, Chiang Mai University and King Mongkut University of Technology North Bangkok, Thailand.

- Summer 2016: Visiting Professor: Xian Polytechnic University, Xian, China; Beijing University of Technology, Beijing, China; Renmin University of China; Northwest University, Xian, China; Northwest A and F University, Yangling, China; Donghua University, Shanghai, China; and Inner Mongolia Agriculture University, Huhehot, China.

- Spring 2016: Visiting Professor, King Mongkut University of Technology North Bangkok, Thailand.

- Fall 2015: Visiting Professor, Donghua University, China.

- Fall 2015: Visiting Professor, School of Business, The Sydney University, Australia.

- Summer 2015: Visiting Chair Professor, Inner Mongolia Agricultural University, Huhehot, China.
- Summer 2015: Visiting Professor: Beijing University of Technology, Beijing, China; Beihang University, Beijing, China; Northwest University, Xian, China; Northwest A and F University, Yangling, China; and Xidian University, Xian, China.
- 12/2014-01/2015: Visiting Professor, King Mongkut University of Technology, Thailand and Thammasat University Thailand.
- 01/2011 - 12/2013: Chair Professor and Houji Scholar, Northwest A and F University, China.
- Summer 2014: Visiting Professor: Northwest A and F University, Yangling, China; Xidian University, Xian, China; Northwest University, Xian, China; Donghua University, Shanghai, China; Beijing University of Technology, Beijing, China; Southwestern University of Finance and Economics, Chengdu, China; Inner Mongolia Agriculture University, Huhehot, China; and Third Military Medical University, Chongqing, China.
- 12/2013-01/2014: Visiting Chair Professor, King Mongkut University of Technology, Thailand. Visiting Professor, Thammasat University and Chiangmai University, Thailand.
- Summer 2013: Visiting Chair Professor, Thammasat University, Thailand.
- Summer 2013: Visiting Professor, Hangzhou Daizi University, Hangzhou, China; Donghua University, Shanghai, China; Xinjiang Agriculture University, Wunomouqi, China; Northwest University, Xian, China; Shanghai Institute of Foreign Trade, Shanghai, China; King Mongkut University of Technology, Bangkok, Thailand; Xidian University, Xian, China; and Inner Mongolia Agriculture University, Huhehot, China.
- 12/2012-01/2013: Visiting Chair Professor, King Mongkut University of Technology, Thailand.
- Summer 2012: Visiting Professor, National Chengchi University, Taiwan; Academia Sinica, Taiwan; Northwest University, Xian, China
- Summer 2011: Visiting Professor, Northwest University, Xian, China; Southwest University of Finance and Economy, Chengdu, China; Changan University, Xian, China; and Yanan University, Yanan, China.
- Summer 2009: Visiting Chair Professor, King Mongkut University of Technology, Thailand.
- Summer 2009: Visiting Professor, Northwest A and F University, China.
- Summer 2009: Visiting Professor, Chinese University of Hong Kong, Hong Kong.

- Fall 2007: Visiting Chair Professor, Southwest University of Finance and Economics, China.
- Fall 2007: Visiting Professor, Northwest A and F University, China.
- Fall 2007: Visiting Professor, Chinese University of Hong Kong, Hong Kong.
- Summer 2002: Visiting Associate Professor, Tsinghua University, Beijing, China and Beijing University of Technology, Beijing, China.
- Summer 2001: Visiting Associate Professor, National Chengchi University, Taiwan.
- Summer 2001: Visiting Associate Professor, Academia Sinica, Taiwan.
- Fall 2000: Visiting Associate Professor, Duke University, USA.
- 08/1992 - 07/1994: Visiting Assistant Professor, New Mexico State University, USA.
- 06/1986 - 01/1987: Visiting Fellow, Queen's University and University of Windsor, Canada.
- 02/1982 - 08/1986: Lecturer, Northwest Forest College, China.

Academic Awards and Grants

- Dr. John A. and Margy Papen Endowed Professor of Actuarial Science, NMSU.
- **NSF proposal** PI, Co PI's Anita Hernandez, Michael Hout, Jose Montelongo, Tonghui Wang, Schwartz, Ana I. Titled "Learning and Memory of English-Spanish Cognates, Verb Phrases, Compound Words, and Idioms - Exploratory Studiesa". R305A240357, submission date: 9/21/2023. Pending.
- **Travel Grant from the College of Arts and Sciences**(Fall 2023). Grant awarded to support my travel, as an invited speaker, to The 10th Integrated Uncertainty in Knowledge Modeling and Decision Making (IUKM 2023), Ishikawa, Japan, November 2-4, 2023.
- **Travel Grant from the College of Arts and Sciences**(Fall 2018). Grant awarded to support travel to attend Joint Statistical Meeting, Vancouver, Canada to present a talk at a special session. August 1, 2018.
- **Research Mini-grant** (Summer 2018), Mathematics Research Promotion Center, National Science Council C/O Institute of Mathematics, Academia Sinica, Taipei, Taiwan.
- **Research and Teaching Grant**(12/2013-01/2014, 12/2014-01/2015, 12/2015-01/2016, 12/2016-01/2017, 12/2017-01/2018, 12/2018-01/2019)), Faculty of Applied Statistics, King Mongkut University of Technology, Thailand.

- Dean's Citation for Teaching (Award) 2015, The University of Sydney Business School.
- **Houji Scholar grant**: 500,000 (Yuan) from 01/2011 to 12/2013, Northwest A and F University, China.
- **Research and Teaching Grant**(06/2013-07/2013), Thammasat University, Thailand. Thailand.
- **Research and Teaching Grant**(12/2012 -01/2013), Faculty of Applied Statistics, King Mongkut University of Technology, Thailand.
- **Research Mini-grant** (Summer 2012), Mathematics Research Promotion Center, National Science Council C/O Institute of Mathematics, Acadmia Sinica Taiwan.
- **Research Mini-grant** (Summer 2012), Institute of Statistics, Acadmia Sinica Taiwan.
- **Mathematically Connected Communities**, Co-PI's Professors Kurtz, Tamez, and Gruzska: 4,532,000 dollars from New Mexico Public Education Department starting from Summer 2010 for a duration of 3 years (October 2009).
- **Mathematically Connected Communities** - Expanded/ Bulger-Tamez, Kinzer: 500,000 dollars from New Mexico Public Education Department (April 2009) for a duration of one year.
- **Research Mini-grant**(Summer 2009), Chinese University of Hong Kong, Hong Kong.
- **Research and Teaching Grant**(Summer 2009), Faculty of Applied Statistics, King Mongkut University of Technology, Thailand.
- **Mathematically Connected Communities** - Expanded/ Bulger-Tamez, Kinzer: 500,000 dollars from New Mexico Public Education Department (April 2008) for a duration of one year.
- **Research Mini-grant**(Fall 2007), Chinese University of Hong Kong, Hong Kong.
- **Research and Teaching Grant**(Fall 2007), Southwest University of Finance and Economics, China.
- **Mathematically Connected Communities**, Co-PI's Professors Kurtz, Tamez, and Wiburg: 2,925,000 dollars from New Mexico Public Education Department starting from Summer 2007 for a duration of 3 years.
- **Mathematically Connected Communities**(Expansion), Co-PI's Professors Bulger, Tamez, and Kinzer, 500,000 dollars from New Mexico Public Education Department starting from April 2007 for a duration of one year.

- **Mathematically Connected Communities**, Co-PI's Professors Kurtz, Scott, and Wiburg: $1,600,000$ dollars from New Mexico Public Education Department starting from Summer 2004 for a duration of 3 years.

  Mathematically Connected Communities(expansion), Co-PI's Professors Kurtz, Scott, and Wiburg: $600,000$ dollars from New Mexico Public Education Department starting April 2006 for a duration of one year.

- **Research Mini-grant**(Summer 2002), Tsinghua University, China.
- **Research Mini-grant**(Summer 2001), Academia Sinica, Taiwan.
- **Research Mini-grant**(Summer 2001), National Research Council, Taiwan.
- **Summer Research Award**(Summer 2000), New Mexico State University.
- **New Mexico State University Research Mini-grant**(Jan. 1995).

Professional Societies and Other Activities:

- President: Chihuahua Desert Chapter of American Statistical Association (1998 - 2000).
- Guest Editor, Journal of Statistical Theory and Practice.
- Advisor: Journal of Management and Statistical Decision.
- Expert Consultant: Business Data Mining Center of Southwestern University of Finance and Economics, China.
- Member: American Statistical Association.
- Member: International Chinese Statistical Association.
- Member: Mathematical Association of America.
- Reviewer: Mathematical Reviews.

Research Interests

(i) Multivariate linear models and distributions of quadratic forms with applications in growth curve models, multivariate analysis of variance models, and the class of skew distributions including skew normal, skew elliptical distributions.

(ii) Statistics of random sets with applications in coarsening data and fuzzy data.

(iii) Probability models and statistical methods in reliability.

(iv) Applications of the mathematical and statistical modeling: statistical analysis in Data Envelopment Analysis (EDA) and Stochastic Frontier Analysis (SFA).

(v) Copulas and their associated dependence measures with applications.

(vi) Statistical inference of stochastic dominance and poverty measures with applications.

(vii) Statistical change points methods.

(viii) Big data analysis and Statistical learning with applications.

(ix) Stochastic Frontier Models with applications.

(x) The APP (A priori procedure) for estimating parameters in various types of models.

Refereed Publications

1. M. Xie, D. Wang, and T. Wang (2025). *Nonparametric adaptive charting schemes for monitoring variability of count data based on a new categorization algorithm Nonparametric adaptive charting schemes for monitoring count data*, Quality and Reliability Engineering International. Accepted. DOI: 10.1002/qre.70074

2. L. He, L. Cao, **T. Wang**, Z. Cao, and X. Shi (2025). *A Bayesian Additive Regression Trees Framework for Individualized Causal Effect Estimation*, Mathematics **13**(13):2195.
DOI: 10.3390/math13132195

3. Z. Wei, S. T. B. Choy, T. Wang, and X. Zhu (2025). *Bayesian Stochastic Frontier Models under the Skew Normal half normal Settings*, Journal of Productivity Analysis. https://doi.org/10.1007/s11123-025-00757-3

4. Z. Wang, **T. Wang**, D. Trafimow, S.T. B. Choy, X. Chen (2024). *Extending a priori procedure for simultaneously estimating location and scale parameters in the context of skew normal distributions*, Accepted at Artificial Intelligence and Machine Learning for Econometrics: Applications and Regulation and Related Topics. N. Thach, N.Trung, D. Ha, and V. Kreinovich Edits. Springer.

5. T. Tong, **T. Wang**, S. T. B. Choy, X. Chen, and D. Trafimow (2024). *The a Priori Procedure (APP) for estimating the location parameter of Laplace distribution.* Accepted in Vladik Kreinovich, Woraphon Yamaka, and Supanika Leurcharusmee (Eds.) Applications of Optimal Transport to Economics and Related Topics. Springer, Cham.

6. Trafimow, D., Tong, T., Wang, T., Choy, S. T. B., Hu, L., Chen, X., Wang, C., & Wang, Z. (2024). *Improving inferential analyses pre-data and post-data.* Psychological Methods. https://psycnet.apa.org/doi/10.1037/met0000697

7. T. Tong, **T. Wang**, and X. Chen, D. Trafimow, S.T.B. Choy. (2024). *Gain-Probability Analysis of Skew t distribution.* Nguyen Ngoc Thach, Nguyen Duc Trung, Doan Thanh Ha, and Vladik Kreinovich (Eds) Partial Identification in Econometrics and Related Topics. Springer Cham. doi.org/10.1007/978-3-031-59110-5-112024

8. N. Coulibaly, Z. Wei, and **T. Wang,** (2024). *Estimation of under reported COVID19 cases with Susceptible Infected Removed epidemiological model via Stochastic Frontier Analysis.* To appear in Vladik Kreinovich, Woraphon Yamaka, and Supanika Leurcharusmee (Eds.) Applications of Optimal Transport to Economics and Related Topics. Springer, Cham.

9. X. Chen, **T. Wang,** S.T.B. Choy, D. Trafimow, and T. Tong (2024). *The a priori procedure for estimating the location parameter under Elliptical settings.* To appear in Vladik Kreinovich, Woraphon Yamaka, and Supanika Leurcharusmee (Eds.) Applications of Optimal Transport to Economics and Related Topics. Springer, Cham.

10. L. Hu, **T. Wang**, D. Trafimow, and S.T. B. Choy (2023). *Extending the A Priori Procedure to Analysis of Variance models Under Normality.* Axioms 2024, 13, 22. https://doi.org/10.3390/axioms13010022

11. Z. Ma, **T. Wang**, Z. Wei, X. Zhu, and S. T. B. Choy, *Extending the A Priori Procedure for estimating location parameter under multivariate skew normal settings.* Optimal Transport Statistics for Economics and Related Topics (N. N. Thach et al. (eds), Springer, 2024.
doi.org/10.1007/978-3-031-35763-3-5

12. Hu, L., **Wang, T.**, Trafimow, D., Choy, S.T.B., Chen, X., Wang, C. and Tong, T. (2023). *The a priori procedure (APP) for estimating median under skew normal settings with applications in economics and finance.* Asian Journal of Economics and Banking, Vol. ahead-of-print No. ahead-of-print.
https://doi.org/10.1108/AJEB-09-2023-0087

13. Wang, C., **Wang T.**, Chen X., Trafimow, D., Tont T., Hu, L. and Choy, S.T.B. (2023). *The a Priori Procedure for Estimating the Cohens Effect Size Under Independent Skew Normal Settings.* In: Huynh, VN., Le, B., Honda, K., Inuiguchi, M., Kohda, Y. (eds) Integrated Uncertainty in Knowledge Modelling and Decision Making. IUKM 2023. Lecture Notes in Computer Science, vol 14375. Springer, Cham.
https://doi.org/10.1007/978-3-031-46775-2-10

14. Trafimow, D., Wang, Z., Tong, T. and Wang, T. (2023),"Gain-probability diagrams as an alternative to significance testing in economics and finance", Asian Journal of Economics and Banking, Vol. 7 No. 3, pp. 333-357.
https://doi.org/10.1108/AJEB-05-2023-0045

15. D. Trafimow, N. Roth, L. Xu, D. Toomasian, A. Perillo, T. Tong, T. Wang, B.S.T. Choy, X. Chen, C. Wang, and L. Hu (2023). *Surprising implications of differences in locations versus differences in means.* Methodology: European Journal of Research Methods for the Behavioral and Social Sciences, 19(2), 152-169.
https://doi.org/10.5964/meth.10969

16. X. Zhu, Z. Wei, T. Wang, S. T. B. Choy, and Z. Ma *An expectation conditional maximization algorithm for the skewnormal based stochastic frontier model.* Computational Statistics (2023)
https://doi.org/10.1007/s00180-023-01356-2

17. L. Cao, C. Wang, X. Chen, D. Trafimow, and **T. Wang** *The a priori procedure (APP) for estimating the Cohen's effect size for matched pairs under skew normal settings*. To Appear in International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems (2023).

18. T. Tong, X. Chen, L. Hu, **T. Wang**, D. Trafimow, and B. Choy *The A Priori Procedure (APP) for Estimating Standardized Regression Coefficients in Multiple Linear Model With Skew Normal Errors*. To appear in Machine Learning for Econometrics and Related Topics, Springer, 2023.

19. C. Wang, H. Li, D. Trafimow, **T. Wang**, and T. Tong, *Programs for Performing the A Priori Procedure in Skew Normal Contexts*. To appear in Thailand Statistician (2023).

20. C. Wilson, D. Trafimow, T. Wang, and Con Wang, *Evaluating the sample precision of social identity related published research*, Graduate Students Journal of Psycholgy, Vol. 19, pp. 1-15 (2022).

21. L. Cao, T. Wang, and X. Feng, *Base on the Public Scientific Quality Improvement Research on Risk Early Warning of Online Shopping*, Wireless Personal Communications, 126, pages 621 - 634 (2022).

22. Z. Ma, Y. Chen, **T. Wang** and J. Liu *Inferences on location parameter in multivariate skew-normal family with unknown scale parameter*, Communications in Statistics - Simulation and Computation, Vol. **51**, No. 9, pp 5465-5481 (2022). doi.org/10.1080/03610918.2020.1772300

23. T. Tong, D. Trafimow, T. Wang, C. Wang, L. Hu, and X. Chen *The A Priori Procedure (APP) for Estimating Regression Coefficients in Linear models*. Methodology European Journal of Research Methods for the Behavioral and Social Sciences 18(3):203-220 (2022). https://doi.org/10.5964/meth.8245

24. Z. Ma, **T. Wang**, X. Zhu, and Z. Wei *Inferences on location parameters based on independent multivariate skew normal distributions*, Journal of Asian Economics and Banking, (2022). DOI: 10.1108/AJEB-03-2022-0034

25. X. Zhu, Z. Wei, and **T. Wang**, *Multivariate Skew Normal-Based Stochastic Frontier Models*, Statistics, 16, 2022. https://doi.org/10.1007/s42519-022-00249-9

26. L. Cao, T. Tong, D. Trafimow, T. Wang, and X. Chen *The APP for estimating the mean in both log-normal and gamma populations and robustness for assumption violations*. Methodology, 2022, Vol. 18(1), 2443. doi.org/10.5964/meth.7321

27. D. Trafimow, M.R. Hyman, A. Kostyk, Z. Wang, T. Tong, T. Wang, and C. Wang *Gain-probability diagrams in consumer research*, International Journal of Market Research, Vol. 64(4) 470483 (2022)
doi.org/10.1177/14707853221085509

28. L. Cao, C. Wang, **T. Wang**, and D. Trafimow *The APP for estimating population proportion based on skew normal approximations and the Beta-Bernoulli process.* Communication in Statistics - Simulation and Computation (2022).
doi.org/10.1080/03610918.2021.2012192

29. X. Zhu, Z. Wei, and T. Wang, *Multivariate Skew Normal-Based Stochastic Frontier Models*, Journal of Statistical Theory and Practice (2022).
doi.org/10.1007/s42519-022-00249-9

30. X. Li, L. Cao, T. Wang, and X. Feng *Based on the Public Scientific Quality Improvement Research on Risk Early Warning of Online Shopping*, Wireless Personal Communications (2022) 126:621634.
doi.org/10.1007/s11277-022-09761-4

31. Z. Wei, X. Zhu, and **T. Wang**. *The extended skew normal based stochastic frontier model with a solution to 'wrong skewness' problem*, Statistics online, November 29, 2021.
DOI: 10.1080/02331888.2021.2004142

32. T. Tong, **T. Wang**, D. Trafimow, and C. Wang *The probability of being better or worse off, and by how much, depending on experimental conditions with skew normal populations*, Credible Asset Allocation, Optimal Transport Methods, and Related Topics (S. Sriboonchitta et al (edts.) Studies in Systems, Decision and Control 429, pp. 261 - 284 (2022).
https://doi.org/10.1007/978-3-030-97273-8-18

33. C. Wang, **T. Wang**, D. Trafimow, and T. Tong, *Estimating the correlation coefficients in a multivariate skew normal population using the a priori procedure (APP)* in Financial Econometrics: Bayesian Analysis, Quantum Uncertainty, and Related Topics, Studies in Systems, Decision and Control 427, pp. 171-185 (2022).
https://doi.org/10.1007/978-3-030-98689-6-11

34. C. Wang, **T. Wang**, D. Trafimow, and Z. Xu *A priori procedure (APP) for estimating the scale parameter in gamma populations for known shape parameter*, S. Sriboonchitta et al. (eds.), *Credible Asset Allocation, Optimal Transport Methods, and Related Topics*, Studies in Systems, Decision and Control 429, pp. 285 - 298 (2022).
https://doi.org/10.1007/978-3-030-97273-8-19

35. X. Chen, D. Trafimow, **T. Wang**, T. Tong, and C. Wang *The APP procedure for estimating the Cohen's effect size.* Asian Journal of Economics and Banking. September, 2021
https://doi.org/10.1108/AJEB-08-2021-0095

36. D. Trafimow, T. Wang, and C. Wang *A Viable Approach to Mitigating Irreproducibility*. Stats, **4**, pp. 205-215 (2021). doi.org/10.3390/stats4010015

37. C. Wang, **T. Wang**, D. Trafimow, K. Talordphop *Estimating the location parameter under skew normal settings: is violating the independence assumption good or bad?*, Soft Computing, March, 2021. DOI: 10.1007/s00500-021-05679-4

38. X. Zhu, Z. Wei, and **T. Wang** *Recent Developments on Asymmetric Association Measures for Contingency Tables*. In book: Direction Dependence in Statistical Modeling (W. Wiedermann et al. Eds.), Wiley, Jan. 2021. DOI: 10.1002/9781119523024.ch9

39. D. Trafimow, M. R. Hyman, A. Kostyk, C. Wang, and T. Wang *The harmful effect of null hypothesis significance testing on marketing research: An example*. Journal of Business Research, November, 125, 39-44. DOI: 10.1016/j.jbusres.2020.11.069.

40. Z. Wei, E. M. Conlon, and **T. Wang** *Asymmetric dependence in the stochastic frontier model using skew normal copula*. International Journal of Approximate Reasoning, **128** (2021), pp 56-68.

    https://doi.org/10.1016/j.ijar.2020.10.011

41. Z. Wang, **T. Wang**, D. Trafimow, and Z. Xu *Comparing two delta log-skew-normal distributions*. In "Prediction and causality in Econometrics and Related topics" (Doan Thanh Ha, Nguyen Duc Trung, Vladik Kreinovich, Nguyen N. Thach Eds.), Springer-Verlag, pp. 97-112 (2021). https://doi.org/10.1007/978-3-030-77094-5

42. D. Trafimow, H. Li, **T. Wang**, L. Hu, C. Wang and A. Rodriguez *Expanding the a Priori Procedure (APP) to Address Proportions*. Journal of Asian Economics, Accounting and Finance, Vol. 1, No. 2, 2020, pp. 117-134.

43. Z. Ma, Y. Chen, **T. Wang** and J. Liu *Inferences on location parameter in multivariate skew-normal family with unknown scale parameter*, Communications in Statistics—Simulation and Computation (2020). doi.org/10.1080/03610918.2020.1772300

44. Z. Wei, **T. Wang**, D. Trafimow, and K. Talordphop *Extending the a priori procedure to normal bayes models*, International Journal of Intelligent Technologies and Applied Statistics Vol.13, No.2 (2020) pp.135-149. DOI:10.6148/IJITAS.202003-13(2).0004

45. H. Li, D. Trafimow, T. Wang, C. Wang, and L. Hu *User-friendly computer programs so econometricians can run the a priori procedure*, Frontiers in Management and Business, 2020, 1(1), pp 2-6 DOI: 10.25082/FMB.2020.01.002

46. C. Wang, **T. Wang**, D. Trafimow, K. Talordphop *Extending the A Priori Procedure to One-way Analysis of Variance model with Skew Normal Random Effects*, Asian Journal of Economics and Banking, **4** (2), pp 77-90 (2020).

47. Z. Ma et al. *Stochastic growth pattern of untreated human glioblastomas predicts the survival time for patients*, Scientific Report 10(1), 2020. doi.org/10.1038/s41598-020-63394-w

48. Z. Wei, B. Li, and **T. Wang** *The Joint Distribution of the Discrete Random Set Vector and Bivariate Coarsening at Random Models*, in Statistical and Fuzzy Approaches to Data Processing, with Applications to Econometrics and Other Areas (V. Kreinovich ed.) Chapter DOI: $10.1007/978-3-030-45619-1_19$ (2020).

49. J. Liu, Y. Duan, and T. Wang *A Parallel Splitting Augmented Lagrangian Method for Two-Block Separable Convex Programming with Application in Image Processing*, Mathematical Problems in Engineering, 2020(1):1-10.
DOI: 10.1155/2020/6872810

50. S. Ru, J. Liu, T. Wang, and G. Wei *Provincial quality of economic growth: measurements and influencing factors for China*, Sustainability, 2020, 12, 1354.
doi:10.3390/su12041354

51. C. Wang **T. Wang**, B. Li, X. Zhu, and Y. Ma *Extending the A Priori Procedure (APP) to Address Correlation Coefficients* in Data Science for Financial Econometrics (N. Trung, N. Thach, and V. Kreinovich Eds.), Springer-Verlag, pp. 141-149 (2020).
doi.org/10.1007/978-3-030-48853-6-10

52. Z. Wei, Z. Zhang, H. Zhang, and **T. Wang** *Conditional dependence among oil, gold and U.S. dollar exchange rates: a copula-GARCH approach* in "Bahavioral Predictive Modeling in Econometrics" (V. Kreinovich and S, Sriboonchitta, and W. Yamaka Eds.), Springer-Verlag, pp. 203-218(2020).

53. Z. Ma, **T. Wang**, B. Li, X. Zhu, and Y. Ma *The decomposition of quadratic forms under matrix variate skew-normal distribution* in "Bahavioral Predictive Modeling in Econometrics" (V. Kreinovich and S, Sriboonchitta, and W. Yamaka Eds.), Springer-Verlag, pp. 181-194 (2020).

54. B. Li, **T. Wang**, and Z. Ma *Find trade patterns in China's stock markets using data mining agents* in "Bahavioral Predictive Modeling in Econometrics" (V. Kreinovich and S, Sriboonchitta, and W. Yamaka Eds.), Springer-Verlag, pp. 171-179(2020).

55. D. Trafimow, A. Rodriguez, H. A. Myuz, C. Wang and T. Wang, *The Precision of Research in Three Top Medical Journals*, Mental Health & Human Resilience International Journal, 2019, 3(1): 000131.

56. C. Wang, **T. Wang**, D. Trafimow and H. A. Myuz, *Necessary sample sizes for specified closeness and confidence of matched data under the skew normal setting.* Communications in Statistics - Simulation and Computation, 51:5, 2083-2094 (2019).
doi.org/10.1080/03610918.2019.1661473

57. C. Wang, **T. Wang**, D. Trafimow and J. Chen, *Extending a priori procedure to two independent samples under skew normal settings.* Asian Journal of Economics and Banking, **3**(2), pp. 29-40(2019).

58. D. Trafimow, C. Wang, and T. Wang, *Making the A Priori Procedure Work for Differences Between Means*, Educational and Psychological Measurement (2019). DOI: 10.1177/0013164419847509

59. C. Wang, **T. Wang**, D. Trafimow, and X. Zhang, *Necessary Sample Size for Estimating the Scale Parameter With Specified Closeness and Confidence*, International Journal of Intelligent Technologies and Applied Statistics (IJITAS), **Vol.12**, No.1, pp. 17-29 (2019). DOI : 10.6148/$IJITAS$.201903$_1$2(1).0002

60. L. Wang, T. Wang, L. Yan, and Z. Ma, *Inference on the exponentiated uniform distribution under records*, International Journal of Intelligent Technologies and Applied Statistics (IJITAS), **Vol.12**, No.1, pp. 65-96 (2019).
DOI : 10.6148/$IJITAS$.201903$_1$2(1).0005

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Books

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Conferences and Invited Addresses

1. *Bridging thoery and practice, Gain-Probability analysis for bivariate gamma distributions* (with Ziyuang Wang), presented at The 33th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, April 12, 2025

2. Invited Colloquium Speaker on *Family of Skew Normal distributions: Properties, Applications, and Recent Research Developments* at Bowling Green State University, USA, March 14, 2025.

3. Invited Speaker on *Extending a priori procedure for simultaneously estimating location and scale parameters in the context of skew normal distributions* (with Z. Wang and D. Trafimow) at The Eighth Econometric Conference of Vietnam (ECONVN2025), Banking University, Ho Chi Minh City, Vietnam, Jan. 13-15, 2025.

4. Invited Speaker on *The a Priori Procedure (APP) for estimating the location parameter of Laplace distribution.* at The 18th International Conference of The Thailand Econometric Society, Chiangmai, Thailand, Jan. 9 - 11, 2025.

5. *The A Priori Procedure (APP) for estimating the location parameter of the Laplace distribution* (with T. Tong and X. Chen), presented at The 32nd NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, Nov. 2, 2024.

6. *Distribution of general quadratic expressions in skew normal settings* (with T. Tong and Z. Ma), presented at The 31st NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, April 6, 2024.

7. *Extending APP for skew normal distributions using Bonferroni Method* (with Z. Wang and D. Trafimow), presented at The 31th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, April 6, 2024.

8. Invited Speaker on *Gain-Probability Analysis of Skew t-distribution.* (with X. Chen and D. Trafimow) at The Seventh Econometric Conference of Vietnam (ECONVN2024), Banking University, Ho Chi Minh City, Vietnam, Jan. 15-17, 2024.

9. Invited Speaker on *The a priori procedure for estimating the location parameter under Elliptical settings.* at The 17th International Conference of The Thailand Econometric Society (TES2024), Chiangmai, Thailand, Jan. 11 - 13, 2024.

10. Invited Speaker on (with N. Coulibaly and Z. Wei) at The 17th International Conference of The Thailand Econometric Society (TES2024), Chiangmai, Thailand, Jan. 11 - 13, 2024.

11. Invited Colloquium Speaker "*The a priori procedure for estimating Cohen's effect size under both dependent and independent skew normal settings*" at Xian Technological University (Zoom talk), November 29, 2023.

12. Invited Speaker on "*The a priori procedure for estimating Cohen's effect size under independent skew normal settings*" at The 10th Integrated Uncertainty in Knowledge Modeling and Decision Making (IUKM 2023), Ishikawa, Japan, November 2-4, 2023.

13. *Bayesian Stochastic Frontier Models under the Skew-Normal Settings*, (with Z. Wei), presented at The 30th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, October 28, 2023.

14. *Gain-Probability Analysis of Skew t distribution*, (with T. Tong), presented at The 30th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, October 28, 2023.

15. *Extending the A Priori Procedure to One-Way Analysis of Variance Under Normality*, (with L. Hu), presented at The 30th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, October 28, 2023.

16. *The a priori procedure for estimating the location parameter under Elliptical settings*, (with X. Chen), presented at The 30th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, October 28, 2023.

17. Invited Colloquium Speaker *Introductory to statistical and machine learning data mining*, presented at Dongfang College, Zhejing University of Economics and Finance, Hangzhou, China, June 20, 2023.

18. Invited Colloquium Speaker *Family of skew normal distributions, properties, applications, and recent development*, presented at College of Mathematics, Northwest University, Xian, China, June 15, 2023.

19. Invited Colloquium Speaker *Statistical and machine learning data mining*, presented at College of Science, Northwest University of A and F University, June 14, 2023.

20. Invited Colloquium Speaker *Statistical and machine learning data mining*, presented at College of Mathematics and Data Science, Xian, China, June 13, 2023.

21. Invited Colloquium Speaker *Statistical and machine learning data mining*, presented at College of Mathematics, Shaanxi Normal University, Xian, China, June 13, 2023.

22. Invited Colloquium Speaker *Family of skew normal distributions, properties, applications, and recent development*, presented at College of Applied Mathematics, Shenzhen University of Technology, Shenzhen, China, June 2, 2023.

23. Invited Colloquium Speaker *Family of skew normal distributions, properties, applications, and recent development*, presented at College of Science, Qingdao University, Qingdao, China, may 31, 2023.

24. Invited Colloquium Speaker *Statistical and machine learning data mining*, presented at Xian Technological University, Xian, China, May 25, 2023.

25. *The A Priori Procedure (APP) for Estimating the Location Parameter Under Elliptical Setting*, (with X. Chen), presented at The 29th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, NMSU. Las Cruces, NM, April 1, 2023.

    https://math.nmsu.edu/activities/utep-nmsu/workshop29.html

26. *The a Priori Procedure (APP) for estimating median under skew normal settings*, (with L. Hu), presented at The 29th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, NMSU. Las Cruces, NM, April 1, 2023.

27. *The A Priori Procedure (APP) for estimating the location parameter of the Laplace distribution*, (with T. Tong), presented at The 29th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, NMSU. Las Cruces, NM, April 1, 2023.

28. Invited Speaker *Extending the A Priori procedure for estimating location parameter under multivariate skew normal setting*, presented (on Zoom) at The Sixth Econometric Conference of Vietnam ECONVN2023, Banking University, Ho Chi Minh City, Vietnam, Jan. 9-11, 2023.

    https://hcm-hn.conference-econ-buh-bav-rist.vn/econvn/econvn-2023-511.html

29. Invited Speaker *The A Priori procedure for estimating regression coefficients in multivariate linear models with skew normal errors*, presented (on Zoom) at The 16th International Conference of The Thailand Econometric Society, Chiangmai, Thailand, Jan. 4 - 6, 2023.

    https://tes.econ.cmu.ac.th

30. Invited Colloquium Speaker on *Statistical and Machine-Learning Data Mining*, presented in International Symposium on Machine Learning for the Coordinated development of the digital Economy, The Society of Shaanxi Technology, Xian Technological University, and New Mexico State University, Xian, China (online conference), November 19 - 20, 2022.

31. Invited Speaker on *The a priori procedure for estimating the Cohen's effect size under skew normal settings*, (with C. Wang and D. Trafimow), presented at The International Conference on Applied Statistics 2022 (ICAS 2022), Bangkok, Thailand, November 3-4, 2022.

    http://icas2022.stat.kmutnb.ac.th/index.php

32. *Flexible Generalized Skew Normal Distribution with Applications*, (with T. Tong, D. Trafimow, and X. Chen), presented at The 28th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, UTEP, El Paso, November 5, 2022.

33. *The A Priori Procedure (APP) for Estimating Standardized Regression Coefficients in Multiple Linear Model with Skew Normal Errors*, (with X. Chen, T. Tong, and D. Trafimow), presented at The 28th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, UTEP, El Paso, November 5, 2022.

34. Invited Speaker on *The a priori procedure for estimating the Cohen's effect size under skew normal settings*, presented at International Conference on Applied Statistics 2022 (ICAS2022), King Mongkuts University of Technology North Bangkok (KMUTNB) with the Thailand Statistics Network, Bangkok, Thailand, November 3, 2022.

35. *Multivariate Skew Normal-Based Stochastic Frontier Models*, (with X. Zhu and Z. Wei), presented at The 27th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, April 2, 2022.

36. *The A Priori Procedure (APP) for Estimating Regression Coefficients in Linear models*, (with T. Tong and D. Trafimow), presented at The 27th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, April 2, 2022.

37. *The a priori procedure (APP) for estimating the Cohens effect size under skew normal settings*, (with X. Chen and D. Trafimow), presented at The 27th NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, April 2, 2022.

38. Invited Speaker on *Estimating the Correlation Coefficients in a Multivariate Skew Normal Population Using the a Priori Procedure (APP)*, presented at The Fifth International Econometric Conference of Vietnam, Banking University, Ho Chi Minh City, Vietnam, Jan. 10-12, 2022.

39. Invited Speaker on *A Priori Procedure (APP) for Estimating the Scale Parameter in Gamma Populations for Known Shape*, (with C. Wang, D. Trafimow, and Z. Xu), presented at The 15th International Conference of The Thailand Econometric Society, Bamgkok, Thailand, Jan. 4 - 6, 2022.

40. Invited Speaker on *The probability of being better or worse off, and by how much, depending on experimental conditions with skew normal population*, (with T. Tong and D. Trafimow), presented at The 15th International Conference of The Thailand Econometric Society, Bamgkok, Thailand, Jan. 4 - 6, 2022.

41. *The APP for estimating population proportion based on skew normal approximations and the Beta-Bernoulli process* (with **C. Wang**, D. Trafimow, and T. Tong), presented in "The 26th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 6th, 2021.

42. *The APP Procedure for estimating the Cohen's effect size* (with C. Wang, D. Trafimow, and **X. Chen**), presented in "The 26th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 6th, 2021.

43. *The probability of being better or worse off, and by how much, depending on experimental conditions with skew normal populations* (with C. Wang, D. Trafimow,

and **T. Tong**), presented in "The 26th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 6th, 2021.

44. *The APP for Estimating the Mean in Both Log-normal and Gamma Populations and Robustness for Assumption Violations* (with C. Wang, D. Trafimow, and T. Tong), presented in "The 26th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 6th, 2021.

45. A Different Kind of Effect Size Based on Samples from Two Populations with Delta Log-Skew-Normal Distributions, invited speaker of The Fourth International Virtual Conference of Econometric Society, Ho Chi Minh City, Vietnam, Jan. 10 -12, 2021.

46. *Decomposition of quadratic forms under skew normal settings*, invited speaker of AMS Central Fall Virtual Meeting, Special Session on Methods and Applications in Data Science, Sept. 12-13, 2020.

47. *Extending the A Priori Procedure (APP) to Address Correlation Coefficients*, invited speaker of The Third International Conference of Econometric Society, Ho Chi Minh City, Vietnam, Jan. 13-16, 2020.

48. *The Decomposition of Quadratic Forms Under Matrix Variate Skew-Normal Distribution*, invited speaker in The 13th International Conference of the Thailand Econometric Society, Jan. 8-11, 2020.

49. *Find trade patterns in Chinas Stock Markets Using Data Mining Agents* (with B. Li), invited speaker in The 13th International Conference of the Thailand Econometric Society, Jan. 8-11, 2020.

50. *Conditional dependence among oil, gold and U.S. dollar exchange rates: a copula-GARCH approach* (with Z. Wei), invited speaker in The 13th International Conference of the Thailand Econometric Society, Jan. 8-11, 2020.

51. Invited Colloquium Speaker on *Family of skew normal distributions, properties, applications, and recent development*, Mathematics and Statistics Department, University of Maine, Orono, Maine, September 19, 2019.

52. Invited Colloquium Speaker on *Alternative statistical methods to p-values*, College of Science, Xian Technological University, Xian, China, July 11, 2019.

53. Invited Colloquium Speaker on *Introduction to statistical learning*, College of Science, Xian University of Science and Technology, Xian, China, July 4, 2019.

54. *Introduction to skew normal families with applications*, invited speaker of The Second International Conference of Uncertainty Theory and Development, Nanjing University of Science and Technology, June 29 - July 1, Nanjing, China.

55. Invited Colloquium Speaker on *Alternative statistical methods to p-values*, College of Business Management, Lanzhou University of Finance and Economy, Lanzhou, China, June 27, 2019.

56. Invited Colloquium Speaker on *Introduction to statistical learning*, College of Statistics, Lanzhou University of Finance and Economy, Lanzhou, China, June 25, 2019.

57. Invited Colloquium Speaker on *Alternative methods to replace p-values*, College of Science, Inner Mongolian Agriculture University, Hohehot, China, June 21, 2019.

58. Invited Colloquium Speaker on *Introduction to statistical learning*, College of Economics, Shandong University of Finance and Economy, Jinan, China, June 18, 2019.

59. Invited Colloquium Speaker on *Techniques for better predictive modeling and analysis of big data*, College of Data Science, Zhejiang University of Finance and Economy, Hongzhou, China, June 14, 2019.

60. Invited Colloquium Speaker on *Alternative statistical methods to p-values*, College of Economics, Hungzhou Dazi University, Hangzhou, China. June 13, 2019.

61. Invited Colloquium Speaker on *Introduction to statistical learning*, School of Business and Management, Dongfang College, Zhejiang University of Finance and Economy, Hongzhou, China, June 11, 2019.

62. Invited Colloquium Speaker on *Family of skew normal distributions, properties, applications, and recent development*, College of Science, Xian University of Technology, Xian, China, June 4, 2019.

63. *Comparisons on measures of asymmetric associations* (with Z. Zhu), presented in "The 24th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 6th, 2019.

64. *The Decomposition of Quadratic Forms Under Matrix Variate Skew Normal Distribution* (with Z. Ma), presented in "The 24th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 6th, 2019.

65. *The parallel splitting augmented Lagrangian method for two-block separable convex programming with application in image processing* (with J. Liu), presented in "The 24th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 6th, 2019.

66. *Necessary Sample Size for Estimating the Correlation Coefficient With Specified Closeness and Confidence* (with C. Wang), presented in "The 24th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, Las Cruces, NM, April 6th, 2019.

67. *Comparisons on measures of asymmetric associations* (with X. Zhu), presented in "The 24th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 6th, 2019.

68. Invited Speaker on *Comparisons on Measures of Asymmetric Associations*, invited speaker of The Second International Conference of Econometric Spciety, Ho Chi Minh City, Vietnam, Jan. 12-16, 2019.

69. Invited Speaker on *The Inference on the Location Parameters Under Multivariate Skew Normal Settings*, invited speaker of The Second International Conference of Econometric Spciety, Ho Chi Minh City, Vietnam, Jan. 12-16, 2019.

70. Invited Speaker on *Desired Sample Size for Estimating the Skewness Under Skew Normal Settings*, invited speaker in The 12th International Conference of the Thailand Econometric Society, Jan. 9-11, 2019.

71. Invited Speaker on *Flexible Constructions for Bivariate Copulas Emphasizing Local Dependence*, invited speaker in The 12th International Conference of the Thailand Econometric Society, Jan. 9-11, 2019.

72. *The Plausibility Regions for Shape Parameters under Multivariate Skew Normal Settings Based on Inferential Models* (with Z. Ma), presented in "The 23rd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 3, 2018.

73. *Optimal Model Averaging Weights under Asymmetric Loss* (with T. Tong), presented in "The 23rd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 3, 2018.

74. *Desired sample size for estimating the skewness under skew normal settings* (with C. Wang), presented in "The 23rd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 3, 2018.

75. *Asymmetric association measures for multi-way contingency tables* (with X. Zhu), presented in "The 23rd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 3, 2018.

76. Invited session speaker on *Comparisons on measures of asymmetric associations*, 2018 Joint Statistical Meeting, Vancouver, Canada, July 29 - August 3, 2018.

77. Colloquium Speaker on *Techniques for better predictive modeling and analysis of big data*, School of Management Science and Engineering, Nanjing University of Information Science and Technology, Nanjing, China, July 11, 2018.

78. Colloquium Speaker on *Distribution of Quadratic forms from normal to skew normal families*, School of Statistics, Shanghai University of Finance and Economics, Shanghai, China July 6, 2018.

79. Colloquium Speaker on *Techniques for better predictive modeling and analysis of big data*, School of Business and Management, Nanzhou University of Finance and Economy, Nanzhou, China, July 3, 2018.

80. Colloquium Speaker on *Skew family of distributions, properties, applications, and recent development*, College of Economics, Hangzhou Dianzi University, Hongzhou, China, June 21, 2018.

81. Colloquium Speaker on *Techniques for better predictive modeling and analysis of big data*, School of Business and Management, Dongfang College, Zhejiang University of Finance and Economy, Hongzhou, China, June 20, 2018.

82. Invited Speaker on *Statistical and machine-learning data mining* at "2018 International Symposium on Country Risk Analysis", Xidian University, Xian, China, June 14-16, 2018.

83. Colloquium Speaker on *Families of skew normal distributions, properties, applications*, College of Science, Xian University of Science and Technology, Xian, China, June 6, 2018.

84. Colloquium Speaker on *Skew family of distributions, properties, applications, and recent development*, College of Science, Shaanxi University of Science and Technology, Xian, China, May 31, 2018.

85. Colloquium Speaker on *Recent development and applications for skew normal families*, Institute of Statistics, Acadmia Sinica, Taiwan, May 22, 2018.

86. Colloquium Speaker on *Statistical and machine-learning data mining*, Department of Mathematical Sciences, National Chengchi University, Taiwan, May 21, 2018.

87. Colloquium Speaker on *New methods for analysis of skewed data under skew normal settings*, Department of Mathematics, New Mexico Institute of Mining and Technology, Socorro, NM, April 13, 2018.

88. *Generalized patchwork constructions for bivariate copulas* (with X. Zhu), presented in "The 22nd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 7, 2018.

89. *Estimation of location and shape parameters under multivariate skew normal settings* (with Z. Ma), presented in "The 22nd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 7, 2018.

90. *Expanding the a priori procedure to skewed distributions* (with C. Wang, D. Trafimow, H. Myuz), presented in "The 22nd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 7, 2018.

91. *Necessary sample sizes for specified closeness and confidence of matched data under the skew normal setting* (with C. Wang, D. Trafimow, H. Myuz), presented in "The 22nd Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 7, 2018.

92. Colloquium Speaker on *Recent contributions in skew normal families and possible research topics*, Department of Applied Statistics, King Mongkut University of Technology North Bangkok, Thailand. Jan. 19, 2018.

93. *Joint Plausibility Regions for Parameters of Skew Normal Family*, invited speaker in The 11th International Conference of the Thailand Econometric Society, Jan. 10-12, 2018.

94. *The decomposition of quadratic forms under skew normal settings*, invited speaker in The 11th International Conference of the Thailand Econometric Society, Jan. 10-12, 2018.

95. *Measures of mutually complete dependence for discrete random vectors*, invited speaker in The 11th International Conference of the Thailand Econometric Society, Jan. 10-12, 2018.

96. *Plausibility regions on parameters of the skew normal distribution based on inferential models*, invited speaker in The 11th International Conference of the Thailand Econometric Society, Jan. 10-12, 2018.

97. Shape mixture models based on multivariate extended skew normal distributions, invited speaker in The 11th International Conference of the Thailand Econometric Society, Jan. 10-12, 2018.

98. Colloquium Speaker on *Techniques for better predictive modeling and analysis of big data*, College of Economics and Management, Northwest A and F University, China, December 21, 2017.

99. Colloquium Speaker on *Family of skew normal distributions, properties and applications*, College of Statistics, Shanghai University of Economics and Finance, China, December 13, 2017.

100. *Necessary sample sizes for specified closeness and confidence of two independent sample data under the skew normal settings* (with C. Wang), presented in "The 21st Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2017.

101. *Bivariate copula constructions* (with S. Wisadwongsa), presented in "The 21st Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2017.

102. *Measures of mutually complete dependence for discrete random vectors* (with X. Zhu), presented in "The 21st Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2017.

103. *Inferences on the location parameter under multivariate skew normal settings* (with Z. Ma), presented in "The 21st Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2017.

104. Invited Speaker on *Comparisons on measures of asymmetric associations* in 2018 Joint Statistical Meeting, Vancouver, Canada, August 1, 2018.

105. Colloquium Speaker on *The ANOVA-type inference in linear models with skew normal error*, College of Science, Northwest A and F University, Yangling, China, July 11, 2017.

106. Invited Speaker on *Statistical and Machine-Learning Data Mining*, School of Statistics, Southwest University of Finance and Economics, Chengdu, China, July 6, 2017.

107. Invited Speaker on *Introduction of skew-families with applications*, College of Mathematics, Shaanxi Normal University, Xian, China, June 30, 2017.

108. Invited Speaker on *Skew normal and other skew families with applications*, College of Science, Xian Polytechnic University, Xian, China, June 29, 2017.

109. Invited Speaker on *Statistical and Machine-Learning Data Mining*, College of Science, Shaanxi University of Science and technology, Xian, China, June 28, 2017.

110. Invited Speaker on *Introduction of skew-families with applications*, Shaanxi University of Science and technology, Xian, China, June 27, 2017.

111. Colloquium Speaker on *Inference in singular multivariate skew normal distributions*, College of Mathematics, Northwest University, Xian, China, June 22, 2017.

112. Invited Speaker on *Statistical and Machine-Learning Data Mining*, College of Mathematics, Northwest University, Xian, China, June 21, 2017.

113. Invited Speaker on *Introduction of skew-families with applications*, College of Mathematics, Northwest University, Xian, China, June 20, 2017.

114. Colloquium Speaker on *The ANOVA-type inference in linear models with skew normal error*, College of Science, Inner Mongolian Agriculture University, Huhehot, China, June 12, 2017.

115. *The new family of multivariate skew slash distributions* (with W. Tian), presented in "The 20th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 8, 2017.

116. *Sampling distributions under closed skew normal settings* (with X. Zhu and B. Li), presented in "The 20th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 8, 2017.

117. *Skewness is a friend not an enemy* (with D. Trafimow and C. Wang), presented in "The 20th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 8, 2017.

118. *Versions of singular multivariate skew normal distributions* (with B. Li and W. Tian), presented in "The 20th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 8, 2017.

119. *Decompositions of quadratic forms under skew normal setting* (with Z. Ma), presented in "The 20th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 8, 2017.

120. *Plausibility regions on the skewness parameter of skew normal distributions based on inferential models*, invited speaker in The 10th International Conference of the Thailand Econometric Society, Jan. 11-13, 2017.

121. *A multivariate generalized FGM copula and its application to multiple regression*, invited speaker in The 10th International Conference of the Thailand Econometric Society, Jan. 11-13, 2017.

122. *The EM estimation for multivariate skew slash distribution*, invited speaker in The 10th International Conference of the Thailand Econometric Society, Jan. 11-13, 2017.

123. *A new estimation method for mixture of normal distributions* (with B. Li), presented in The 10th International Conference of the Thailand Econometric Society, Jan. 11-13, 2017.

124. *Constructions of multivariate copulas*, invited speaker in The 10th International Conference of the Thailand Econometric Society, Jan. 11-13, 2017.

125. Colloquium Speaker on *Current research topics in skew normal families*, Deaprtment of Mathematics and Statistics, University of Texas at El Paso, Novermber 11, 2016.

126. *Estimation of parameters in skew-normal family using Inferential Models* (with Ziwei Ma), presented in "The 19th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2016.

127. *Distribution of quadratic forms under closed skew normal settings* (with Xiaonan Zhu), presented in "The 19th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2016.

128. *Performance bivariate copulas on the Shewhart control chart* (with Sasigarn Kuvattana), presented in "The 19th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 4, 2016.

129. *Multiple copula regression function and directional dependence under multivariate non-exchangeable copulas*, presented in The 9th International Conference of the Thailand Econometric Society, Jan. 6-8, 2016.

130. Colloquium Speaker on *Inferential models based statistical Inference and applications*, College of Science, Xian Polytechnic University, Xian, China, July 7, 2016.

131. Colloquium Speaker on *The p-value crisis and related issues*, College of Science, Northwest A and F University, Yangling, China, July 4, 2016.

132. Colloquium Speaker on *Inference on the Normal Mean with Known Coefficient of Variation based on inferential models*, College of Mathematics, Northwest University, Xian, China, June 30, 2016.

133. Colloquium Speaker on *The p-value crisis and related issues*, College of Information Technology, Renmin University of China, Beijing, China, June 15, 2016.

134. Colloquium Speaker on *Inferential Model based Statistical Inference — Inference on the Normal Mean with Known Coefficient of Variation*, College of Applied Sciences, Beijing University of Technology, Beijing, China, June 13, 2016.

135. Colloquium Speaker on *The p-value crisis and related issues*, College of Science, Inner Mongolia Agriculture University, China, June 1, 2016.

136. *Constructions of Multivariate copulas* (with X. Zhu), presented in "The 18th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 2, 2016.

137. *Confidence intervals for the normal mean with known coefficient of variation based on inferential models* (with Z. Ma and X. Zhu), presented in "The 18th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 2, 2016.

138. *Confidence intervals for the normal mean with known coefficient of variation* (with Z. Wang and C. Wang), presented in "The 18th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 2, 2016.

139. *Quadratic forms of refined skew normal models based on stochastic representation* (with W. Tian), presented in "The 18th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at NMSU, April 2, 2016.

140. *The multivariate extended skew normal distribution and its quadratic forms*, presented in The 9th International Conference of the Thailand Econometric Society, Jan. 6-8, 2016.

141. *On Consistency of Estimators Based on Random Set Vector Observations*, presented in The 9th International Conference of the Thailand Econometric Society, Jan. 6-8, 2016.

142. *Multiple copula regression function and directional dependence under multivariate non-exchangeable copulas*, presented in The 9th International Conference of the Thailand Econometric Society, Jan. 6-8, 2016.

143. *Shape Mixtures of the Matrix Variate Skew Normal Distribution* (with W. Tian), presented in "The 17th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 7, 2015.

144. *The Multivariate Extended Skew Normal Distribution and its Quadratic Forms* (with W. Tian), presented in "The 17th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 7, 2015.

145. *Joint distributions of random fuzzy set vector* (with X. Zhu), presented in "The 17th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 7, 2015.

146. *Estimation in Extended Skew-Cauchy Distributions* (with C. Wang), presented in "The 17th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", at UTEP, November 7, 2015.

147. Colloquium Speaker on *Copulas with applications, an invitation to modern statistics*, School of Business, The Sydney University, Australia, October 2015.

148. Colloquium Speaker on *Skew normal and other skew families with applications*, School of Mathematics and Statistics, The Sydney University, Australia, September 2015.

149. Colloquium Speaker on *Copulas with applications, an invitation to modern statistics*, Northwest A and F University, China, July 2015.

150. Colloquium Speaker on *Copulas with applications, an invitation to modern statistics*, Northwest University, China, July 2015.

151. Colloquium Speaker on *Measures for functional dependence*, Beijing University of Technology, China, June 2015.

152. Colloquium Speaker on *Current development in skew families with applications*, Beihang University, China, June 2015.

153. *Copulas and measures of dependence* (with T. Wongyang), presented in "The 16th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 11, 2015.

154. *Estimations of the measures of directional dependence* (with Q. Shan), presented in "The 16th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 11, 2015.

155. *On Consistency of estimators based on random set vector observations* (with Z. Wei), presented in "The 16th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 11, 2015.

156. *The multivariate extended skew normal distribution and its quadratic forms* (with W. Tian and C. Wang), presented in "The 16th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 11, 2015.

157. *Distortion risk measures under skew normal settings*, presented in The 8th International Conference of the Thailand Econometric Society, Jan. 7-9, 2015.

158. *The joint belief function and Shapley value for the joint cooperative game*, presented in The 8th International Conference of the Thailand Econometric Society, Jan. 7-9, 2015.

159. *Measures of functional dependence* (with Q. Shan and T. Wangyong), presented in "The 15th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 1, 2014.

160. *The decomposition of skew chi-square distribution* (with W. Tian), presented in "The 15th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 1, 2014.

161. *Copula based Markov chains with application on coalescent model* (with Z. Wei and J. Tian), presented in "The 15th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 1, 2014.

162. *The Other perspective on the functional Chi-Square and the possible relationship with the measure of complete dependence* (with T. Wangyong), presented in "The 15th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 1, 2014.

163. Colloquium Speaker on *The Joint distribution of random set and Shapley value*, Southwest University of Finance and Economy, China, July 2014.

164. Colloquium Speaker on *Some research topics in skew normal and other skew families*, Beijing Polytechnic University, China, July 2014.

165. Colloquium Speaker on *Statistical methods using SAS*, College of Life Science, Inner Mongolia Agriculture University, China, June 2014.

166. Colloquium Speaker on *skew normal and other skew families with applications*, Shanghai College of Finance and Economics, June 2014.

167. Colloquium Speaker on *Research topics in skew normal family.* College of Science, Donghua University, China, June 2014.

168. Invited Speaker on *Study at New Mexico State University and USA*, Northwest A and F University, China, May 2014.

169. Colloquium Speaker on *The joint distribution of bivariate random set vectors*, Department of mathematics, Northwest University, China, May 2014.

170. Colloquium Speaker on *The joint Shapley value of bivariate random set vectors*, Department of Mathematics and Statistics, Xian Dianzi University, China, May 2014.

171. *Dependence and association concepts through copulas*, presented in The Seventh International Conference of the Thailand Econometric Society, Jan. 9-11, 2014.

172. Colloquium Speaker on Distribution of discrete random set and its applications, Faculty of Mathematics and Statistics, Thamassat University, Thailand, January 2014.

173. *Comparison of classification Methods for predicting grasshopper population*(with I. C. Hernandez), presented in "The 14th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 2, 2013.

174. *Skew-normal Construction beyond Factor Copula Model and Pair Copula Model*(with Z. Wei), presented in "The 14th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 2, 2013.

175. *Risk Measures and Asset Pricing Models with Wang Transforms under Flexible Skew-generalized Distributed Settings*, presented in "The 14th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 2, 2013.

176. *A Measure for Mutual complete Dependence and Its Estimation* (with Q. Shan), presented in "The 14th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", November 2, 2013.

177. Colloquium Speaker on *Skew normal distributions: properties and applications*, College of Science, Inner Mogolia Agriculture University, China, August 2013.

178. Colloquium Speaker on *Comparison of classification Methods; kernel discriminant analysis, artificial neural networks and logistic regression for predicting grasshopper population*, College of Life Science, Inner Mogolia Agriculture University, China, August 2013.

179. Colloquium Speaker on *Comparison of classification Methods; kernel discriminant analysis, artificial neural networks and logistic regression for predicting grasshopper population*, College of Agriculture, Xinjiang Agriculture University, China, July 2013.

180. Colloquium Speaker on *Variance component models under skew-normal settings*, Department of mathematics, Northwest University, China, July 2013.

181. Colloquium Speaker on *Current research topics on skew-normal and skew-elliptical families*, Faculty of Statistics, King Mongkut University, Thailand, July 2013.

182. Colloquium Speaker on *Skew-distributions and applications*, Faculty of Mathematics and Statistics, Thammasat University, Thailand, June 2013.

183. Colloquium Speaker on *Risk measures with new versions of Wang transforms*, Business Information Management School, Shanghai Institute of Foreign Trade, China, June 2013.

184. Colloquium Speaker on *Distribution of matrix quadratic forms under skew-normal setting*, College of Economics, Hangzhou Daizi University, China, June 2013.

185. Colloquium Speaker on *Introduction to skew-distributions: properties and applications*, College of Science, Donghua University, China, June 2013.

186. *Research topics on skew-normal and skew-elliptical distributions*, presented in International Workshop on Applied Mathematics and Statistics, Northwest A and F University, Yangling, China, May 29-31, 2013.

187. *Dependence and association concepts through copulas*(with Z. Wei), presented in International Workshop on Applied Mathematics and Statistics, Northwest A and F University, Yangling, China, May 29-31, 2013.

188. *Estimation of parameters in skew-elliptical family* (with W. Tian), presented in International Workshop on Applied Mathematics and Statistics, Northwest A and F University, Yangling, China, May 29-31, 2013.

189. *Distribution of matrix quadratic forms under skew-normal settings*(with R. Ye), presented in "The 13th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 6, 2013.

190. *A measure for MCD in discrete variables*(with Q. Shan), presented in "The 13th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 6, 2013.

191. *Dependence and association concepts via copula*(with Z. Wei), presented in "The 13th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 6, 2013.

192. *Estimation of parameters in Tobit models under skew-normal settings*(with W. Tain), presented in "The 13th Joint NMSU/UTEP Workshop on Mathematics, Computer Science, and Computational Sciences", April 6, 2013.

193. *Risk measures and asset pricing models with new versions of Wang transform*, presented in The Six International Conference of the Thailand Econometric Society, Jan. 10-11, 2013.

194. Colloquium Speaker on *An invitation to copulas and measures of dependence*, Faculty of Mathematics and Statistics, Thammasat University, Thailand, December, 2012.

195. Colloquium Speaker on *Research topics on skew-normal and skew-elliptical families*, Faculty of Statistics, King Mongkut University, Thailand, December 2012.

196. *Risk measures and asset pricing models with new versions of Wang transform*(with B. Li and W. Tian), presented in "The 12th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", October 27, 2012.

197. *Stochastic optimal control of a space robot to approach a tumbling object for capture* (with A. Flores-Abad, Z. Wei, and O. Ma), presented in "The 12th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", October 27, 2012.

198. *Estimation of parameters in skew-elliptical family based on copula structure analysis*(with W. Tian), presented in "The 12th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", October 27, 2012.

199. *Inferences in variance components of variance models under skew-normal settings*(with R. Ye), presented in "The 12th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", October 27, 2012.

200. Colloquium Speaker on *Distributions of Quadratic Forms in Linear Mixed Models with Skew-Normal Random Effects* Institute of Statistical Science, Academia Sinica, Taiwan, July 25, 2012.

201. Colloquium Speaker on *Inferences in variance components models under skew-normal settings* (with R. Ye), National Chengchi University, Taiwan, July 24, 2012.

202. Colloquium Speaker on *Estimating poverty measures using truncated distributions and its applications*, Northwest University, China, July 5, 2012.

203. *Semi-heuristic poverty measures used by economists: Justification motivated by fuzzy techniques* (with K. Villaverde et al.), presented at "International Workshop on Research Issues in Applications of Probability and Statistics", Northwest A and F University, May 31, 2012.

204. *Studying poverty measures using stochastic dominance and its applications* (with N. Albehery), presented at "International Workshop on Research Issues in Applications of Probability and Statistics", Northwest A and F University, China, May 31, 2012.

205. *Distribution of quadratic forms in linear mixed models with skew-normal random effects* (with R. Ye), presented in "The 11th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", March 31, 2012.

206. *The skew slash elliptical distributions* (with W, Tian) presented in "The 11th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", March 31, 2012.

207. *Analysing the Tobit model under inverse-scale skew normal settings* (with W. Tian), presented in "The 10th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", November 5, 2011.

208. *Estimating poverty measures using truncated distributions* (with N. Albehery), presented in "The 10th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", November 5, 2011.

209. Lecture series on *Experiment Design and Analysis*(undergraduate and graduate level, 20 hours), Northwest A and F University, Yangling, China, May-June 2011.

210. Research Topic series on *An invitation to heavy tails* (graduate level, 10 hours), Northwest A and F University, Yangling, China, May-June 2011.

211. Colloquium Speaker on *Heavy tailed distributions and their applications*, College of Science, Northwest A and F University, Yangling, China, July 2011.

212. Colloquium Speaker on *Statistical inferences of poverty measures using U-statistics with applications*, Southwest University of Finance and Economy, Chengdu, China, July 2011.

213. Statistical inference of poverty measures using U-statistics approach with real data applications, (with Nagwa, Albehery), International Conference in Applied mathematics and Statistics, Northwest A and F University, Yangling, China, June, 2011.

214. Colloquium Speaker on *A new version of Wangs Transform based on skew-normal distributions*, College of Science, Changan University, Xian, China, June 2011.

215. Colloquium Speaker on *Statistical inferences for poverty measures using U-statistics*, Department of Mathematics, Northwest University, Xian, China, June 2011.

216. Colloquium Speaker on *Skew normal distributions — properties and applications*, College of Science, Yanan University, Yanan, China, July 2011.

    Chair and Speaker of "Lecture Series in Applied mathematics and Statistics" Northwest A and F University, Yangling, China, May and June 2011.

217. *Stochastic dominance of poverty measures and its applications* (with N. Albehery), presented in "Third International Workshop in Sequential Methodologies, Stanford University", June 14-16, 2011.

218. *Estimation of Parameters in Inverse Scale Factor Skew-Normal Distributions* (with W. Tian), presented in "The 9th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", April 2, 2011.

219. Stochastic Dominance of Poverty Measures and its Applications (with N. Albehery), presented in "The 9th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", April 2, 2011.

220. *Approximation of Binomials and Negative Binomials with Two Families of Skew-Normal Distributions* (with B. Li), presented in "The 9th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", April 2, 2011.

221. *Computing reasonable allocations in coalition games*(with B. Li), presented in "Proceedings of The 11th international Conference on Intelligent Technologies", Bangkok, Thailand, December 14-16, 2010.

222. *Estimation of poverty measures with real data applications* (with N. Albehery), "Proceedings of The 11th international Conference on Intelligent Technologies", Bangkok, Thailand, December 14-16, 2010.

223. *Statistical inference of poverty measures using U-statistics approach* (with N. Albehery), presented in "The 8th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", November 13, 2010.

224. *Estimation of linear regression model with skew normal errors* (with B. Li), presented in "The 8th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", November 13, 2010.

225. *Probability transforms with stable generators* (with W. Tian and W. Panichkitkosolkul), presented in "The 8th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", November 13, 2010.

226. *An Overview of quadratic forms under skew normal settings*, presented in "The 8th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences", November 13, 2010.

227. Colloquium Speaker on *Inferences of parameters in skew normal distributions*, Department of Mathematical Sciences, University of Texas at El Paso, October, 2010.

228. Colloquium Speaker on *The distribution of quadratic forms in skew distributions*, Department of Mathematics, Chinese University of Hong Kong, Hong Kong, May 2009.

229. Colloquium Speaker on *Estimation in skew normal distributions*, Faculty of Applied Statistics, King Mongkut University, Thailand, June 2009.

230. Lecture series on *Econometric Analysis* (graduate level,10 hours), College of Science, Northwest A and F University, China, May-June 2009.

231. Lecture series on *The non-parametric statistics and Regression analysis* (undergraduate level, 10 hours), New College, Northwest A and F University, China, June 2009.

232. Lecture series on *Linear and non-linear statistical models* (graduate level, 45 hours), Faculty of Applied Statistics, King Mongkut University, Thailand, June 2009.

233. *Some Applications of one-sided skew distributions* (with B. Li), presented in "The 9th International Conference on Intelligent Technologies", Samui, Thailand, October 7-9, 2008.

234. *Data Mining and Statistical Analysis of Human Interactions* (with B. Li and D. Shi), presented in "The 9th International Conference on Intelligent Technologies", Samui, Thailand, October 7-9, 2008.

235. Colloquium Speaker on *An introduction to data mining procedures*, College of Science, Northwest A and F University, Xian, China, November, 2007.

236. Colloquium Speaker on *A brief introduction to skew normal and other distributions*, Department of Mathematics, Northwest University, Xian, China, November, 2007.

237. Colloquium Speaker on *The skew normal distribution and its applications*, Department of Mathematics, The Chinese University of Hong Kong, Hong Kong, November, 2007.

238. Colloquium Speaker on *The skew normal distribution and its quadratic forms*, Department of Mathematics, The Sichuan University, Chengdu, China, October, 2007.

239. Colloquium Speaker on *Review of skew normal distributions and applications*, Southwest University of Finance and Economy, Chengdu, China, October 2007.

240. Colloquium Speaker on *Versions of Cochran's theorems*, Department of Mathematics and Statistics, Bowling Green State University, Ohio, September, 2007.

241. Colloquium Speaker on *The skew normal distribution and its applications*, College of Science, The Northwest A and F University, Yangling, China, July, 2007.

242. *Quadratic forms in skew normal distributions* (with B. Li), presented in "The sixth International Conference on Information and Management Sciences", Lhasa, China, July, 2007.

243. *The construction of minimum error tree with perturbation method* (with B. Li), presented in "The sixth International Conference on Information and Management Sciences", Lhasa, China, July, 2007.

244. *Core and allocation functions of random sets* (with B. Li), *Statistics and Decision Analysis* Session of "The Fifth International Conference on Information and Management Sciences", Chengdu, China, July 2006.

245. *On consistency of estimators based on random set observations*, (with Li). Presented at *Statistics and Decision Analysis* section of "Fifth International Conference on Intelligent Technologies", Houston, December, 2004.

246. Colloquium Speaker on *Linear models with applications using SAS*, Department of Mathematics and Computer Sciences, Shaanxi Polytechnic University, Xianyang, China, August, 2004.

247. *On the convergence of Choquet capacity functionals*(with D. Feng), Presented at Joint Mathematics Meetings of AMS and MAA, Phoenix, January, 2004.

248. *Inferences in Growth Curve Models under Elliptical Settings* (with Li). Presented at "Fourth International Conference on Intelligent Technologies", Chiang Mai, Thailand, December, 2003.

249. Colloquium Speaker on *Wishartness of quadratic forms in normal settings*, Department of Mathematics, Northwest University, Xian, China, March 2003.

250. Colloquium Speaker on *Versions of Cochran's theorem with applications*, College of Science, Beijing Polytechnic University, Beijing, China, March, 2003.

251. Colloquium Speaker on *Reviews of generalized linear models*, Department of Mathematics, Tsinghua Unversity, Beijing, China, March, 2003.

252. *On convergence of possibility measures* (with Nguyen). Presented at International Conference on Fuzzy Information Processing Theories and Applications, Beijing, China, March 2003.

253. *Towards foundations of processing imprecise data: from traditional statistical techniques of processing crisp data to statistical processing of fuzzy data* (with Nguyen and Kreinovich). Presented at International Conference on Fuzzy Information Processing Theories and Applications, Beijing, China, March 2003.

254. Colloquium Speaker on *Mixed linear models with applications*, Department of Mathematics, Tsinghua Unversity, Beijing, China, July, 2002.

255. Colloquium Speaker on *Multivariate linear models under elliptical settings*, College of Life Science, Northwest Sci-Tech University of Agriculture and Forestry, Yangling, Shaanxi, China, June 2002.

256. Colloquium Speaker on *Inverse problems with solution methods*, College of Arts and Sciences, Shaanxi Polytechnic University, Hanzhong, China, June 2002.

257. Colloquium Speaker on *Random sets for statistics*, College of Science, Beijing Polytechnic University, Beijing, China, May, 2002.

258. Colloquium Speaker on *Inferences in growth curve models under elliptical settings*, Institute of Statistics, Academia Sinica, Taiwan, May 2001.

259. Colloquium Speaker on *Singular elliptically contoured distributions with applications*, Statistical Institute, National Chengchi University, Taiwan, May 2001.

260. Colloquium Speaker on *Estimations in multivariate mixed linear models*, Department of Statistics, Fu Jen Catholic University, Taiwan, may 2001.

261. Colloquium Speaker on *Inverse problems and their resolutions*, Department of Applied Mathematics, National Chengchi University, Taiwan, May 2001.

262. *Inverse problems with applications.* Presented at MAA Southwest Section Meeting, Las Cruces, New Mexico, April, 2001.

263. Second International Conference on Intelligent Technologies, Bangkok, Thailand, Dec. 13-15, 2000. Present the invited paper *On probabilistic methods in fuzzy theory.*

264. IMS Workshop on "Fractals and Dynamical Systems", Chinese University of Hong Kong, Hong Kong, Dec. 4-8, 2000. Presented invited paper *Local dimensions of fractal probability measures associated with the* $(0, 1, 3)$*-problem.*

265. Colloquium Speaker on *Generalized linear models under elliptical settings*, Department of Mathematics, City University of Hong Kong, Hong Kong, December, 2000.

266. Short Course on *Statistical Inverse Problems with Applications* (two hours/week for nine weeks from August to October, 2000), Department of Electrical and Computer Engineering, Duke University.

267. Lecture Series (12 hours in September, 2000) on the "Linear Algebra, Probability, and Statistics" parts in the graduate course *Inverse Problems in Electro-magnetics and Acoustics*, Department of Electrical and Computer Engineering, Duke University.

268. *Estimation in random effect models under elliptical settings.* Presented in "The 1999 Joint Statistical Meetings" (ASA-ENAR-WNAR-IMS-SSC) in Baltimore, Maryland, August 8-12.

269. *Linear models under elliptical settings.* Presented at MAA Southwest Section Meeting, Silver City, New Mexico, April, 1999.

270. *Detections and Classifications.* Lecture Series (5 lectures) given in Detection Group of Klipsch School of Electrical and Computing Engineering, New Mexico State University, Las Cruces, NM, Feb.- March, 1999.

271. *Estimation in multivariate elliptically contoured linear models.* Colloquium, Department of Mathematics, New Mexico State University, Las Cruces, NM, March, 1999.

272. *An Alternative proof of a version of Cochran's Theorem under elliptical settings.* Presented in Seventh International Workshop on Matrices and Statistics in Celebration of T. W. Anderson's 80th Birthday, Fort Lauderdale, Florida, December, 1998.

273. *Linear models and Cochran's theorem.* Colloquium, Department of Mathematics, Shaanxi Institute of Technology, Xian, China, July, 1997.

274. *Review of various versions of Cochran's theorem.* Colloquium, Department of Mathematics, Northwest University, Xian, China, July, 1997

275. *Random sets on a finite space with application to the theory of evidence.* Presented at MAA Southwest Section Meeting, Grants, New Mexico, April, 1997.

276. *Random sets and belief measures.* Invited paper presented at IMA Workshop: Applications and Theory of Random Sets, University of Minnesota, Minneapolis, Minnesota, August, 1996.

277. *Estimation in multivariate elliptically contoured models II.* Presented at Sixth Eugene Lukacs Symposium (on Multivariate Statistical Analysis and Theory of Random Matrices), Bowling Green State University, Bowling Green, Ohio, March, 1996.

278. *Estimation in multivariate elliptically contoured models.* Colloquium, University of Windsor, Windsor, Ontario, Canada, January, 1995.

279. *Some mathematical aspects of multivariate statistical analysis—- Cochran theorems.* Colloquium, New Mexico State University, Las Cruces, NM, February, 1994.

280. *multivariate moments and Cochran theorems.* Colloquium, University of Windsor, Windsor, Ontario, Canada, October, 1992.

281. *Moments of a random matrix and its quadratic forms.* Colloquium, New Mexico State University, Las Cruces, NM, October, 1992.

282. *Higher order moments and their applications.* Colloquium, University of Okanangan, Kelowna, BC, Canada, May, 1992.

283. *Moments of a random matrix and its quadratic forms for multivariate elliptically contoured distributions.* Presented at CSS Annual Meeting, Edmonton, Alberta, Canada, June, 1992.

284. *Best Quadratic unbiased estimator of population covariance Σ in a multivariate elliptically contoured model.* Presented at CSS Annual Meeting, Toronto, Ontario, Canada, June, 1991.

285. *General multivariate versions of Cochran theorems.* Presented at Statistics' 91 Canada Conference, Montreal, Quebec, Canada, May, 1991.

286. *On the orthogonal Procrustes problem in factor analysis.* Colloquium, University of Windsor, Windsor, Ontario, Canada, June, 1988.

Professional Service

- Organizer and Chairing sessions in The 33th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, NM, April 12, 2025
- Chairing sessions in The 32nd Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, TX, November 2, 2024.

- Organizer and Chairing sessions in The 31st Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, NM, April 6, 2024
- Chairing a session "Optimization and Statistical Methods II" at The 10th Integrated Uncertainty in Knowledge Modeling and Decision Making (IUKM 2023), Ishikawa, Japan, November 2-4, 2023.
- Chairing sessions in The 30th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, TX, October 28, 2023.
- Organizer and Chairing sessions in The 29th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, NM, April 1, 2023.
- Organizer and Chairing sessions at International Forum on Machine Learning for the Coordinated Development of the Digital Economy, Conference Organizer, Xian, China (on zoom), November 19 - 20, 2022.
- Organizer and Chairing sessions in The 27th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, Las Cruces, NM, April 2, 2022.
- Organizer and Chairing sessions in The 26th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, Texas, November 6, 2021.
- Member of Scientific Committee, ECONVN2019 - ECONVN2023, .
- Member of Scientific Committee, TES2015 - TES2023.
- Chairing a session in The 2nd International Conference of Uncertainty Theory and Develop, Nanjing, China, June 29 - July 1, 2019.
- Organizer and Chairing sessions in The 24th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 6, 2019.
- Chairing two sessions in The 2nd International Econometric Conference of Vietnam, Hochiminh City, Vietnam, Jan. 14-16, 2019.
- Member of Scientific Committee, ECONVN2019.
- Chairing two sessions in The 11th International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 9-11, 2019.
- Member of Scientific Committee, TES2019.

- Chairing a session in The 23rd Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in El Paso, Texas, November 3, 2018.
- Organizer and Chairing a session in The 22nd Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 7, 2018.
- Chairing a session in The 11th International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 10-12, 2018.
- Member of Scientific Committee, TES2018.
- Organizer and Chairing a session in The 21th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in El Paso, Texas, November 4, 2017.
- Organizer and Chairing a session in The 20th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 8, 2017.
- Member of Scientific Committee, TES2017.
- Chairing a session in The 10th International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 11-13, 2017.
- Organizer and Chairing a session in The 19th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, Texas, November 5, 2016.
- Organizer and Chairing a session in The 18th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 2, 2016.
- Chairing a session in The 9th International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 6-8, 2016.
- Member of Scientific Committee, TES2016.
- Organizer and Chairing a session in The 16th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 11, 2015.
- Chairing a session in The Eighth International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 7-9, 2015.
- Member of Scientific Committee, TES2015.

- Chairing a session in The 14th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in El Paso, Texas, November 1, 2014.
- Chairing a session in The Seventh International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 8-10, 2014.
- Member of Scientific Committee, TES2014.
- Organizer and Committee Chair of "International Workshop on Applied Mathematics and Statistics", Northwest A and F University, Yangling, China, May 29-31, 2013.
- Organizer and Chairing a session in The 11th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, March 31, 2012.
- Organizer and Speaker of "Lecture Series in Applied mathematics and Statistics" Northwest A and F University, Yangling, China, May and June 2012.
- Chair and Organizer of International Conference Series in Applied mathematics and Statistics, Northwest A and F University, Yangling, China, May-June 2012.
- Chairing a session in The 12th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, Texas, October 27, 2012.
- Chairing a session in The Sixth International Conference of the Thailand Econometric Society, Chiangmai, Thailand, Jan. 10-11, 2013.
- Member of Scientific Committee, TES2013.
- Organizer and Chairing a session in The 13th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 6, 2013.
- Chairing a session in The 10th UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in El Paso, Texas, November 5, 2011.
- Chair and Organizer of International Conference (Series I, II, and III) in Applied mathematics and Statistics, Northwest A and F University, Yangling, China, May-June 2011.
- Organizer and Speaker of "Lecture Series in Applied mathematics and Statistics" Northwest A and F University, Yangling, China, May and June 2011.
- Organizer and Chairing a session in The 9th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in Las Cruces, New Mexico, April 2, 2011.

- Chairing a session in The 8th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences was held in El Paso, Texas, on November 11, 2010.
- Chairing a session in The 11th International Conference on Intelligent Technologies, Bangkok, Thailand, December 2010.
- Chairing a session in The Sixth International Conference on Information and Management Sciences, Lhasa, China, July, 2007.
- Chairing a session in The Fifth International Conference on Intelligent Technologies, Houston, USA, December 2003.
- Chairing a session in The Fourth International Conference on Intelligent Technologies, Chiang Mai, Thailand, December, 2002.
- Chairing a session in The International Conference on Fuzzy Information Processing Theories and Applications, Beijing, China, March 2003.
- Organizer(with Professor Ray Mines) of MAA Southwest Section Meeting at Las Cruces, USA, April 2001.
- Chairing a session in The Second International Conference on Intelligent Technologies, Bangkok, Thailand, December 2000.

Referee for:

- *Statistics in Medicine.*
- *Communication in Statistics, Simulation and Computation.*
- *Statistics and Probability Letters.*
- *Biometrics.*
- *Frontiers of Mathematics in China.*
- *Canadian Journal of Statistics.*
- *Communication in Statistics– Theory Methods.*
- *IEEE Transactions of Geo-science and Remote Sensing.*
- *IEEE Transactions of Fuzzy Systems.*
- *International Journal of Approximate Reasoning.*
- *International Journal of Intelligent Technologies and Applied Statistics.*
- *Journal of Applied Mathematics.*
- *Journal of Applied Probability and Statistics.*
- *Journal of Probability and Statistics.*
- *Journal of Multivariate Analysis.*
- *Journal of Statistical Planning and Inference.*
- *Linear Algebra and Its Applications.*
- *Mathematical and Computer Modeling.*
- *Journal of the Institute of Statistical Mathematics.*
- *Annals of Operation Research.*
- *International Journal of Computers and Mathematics with Applications.*
- *Statistical Papers, Springer.*
- *Applied Mathematical Modeling.*
- *Peer J.*
- *Quality and Reliability Engineering International.*

Reviewer for Mathematical Reviews.

Selected Department of Mathematical Sciences Activities

- Ph.D. thesis supervision of Xiangfei Chen. Ph.D. completed in Spring 2025. Thesis title: *Minimum Sample Size Requirements for Estimating Parameterss unider Elliptical and Scale Micture of Skew Normal Settings*. Dr. Chen is a Tenure-Track Assistant Professor at Bridgewater State University, MA, USA.

- Ph.D. thesis supervision of Liqun Hu. Ph.D. completed in Summer 2024. Thesis title: *Minimum Sample Size requirements for Estimation of Parameters in Analysis of Variance Models under Skew Norma Settings*. Dr. Hu is an Associate Professor at Northwest A & F University, China.

- Ph.D. thesis supervision of Tingting Tong. Ph.D. completed in Spring, 2024. Dr. Tong is a Tenure-Track Assistant Professor at The College of Charleston, SC, USA.

- Ph.D. thesis supervision of Ziyuan Wang. Ph.D. completed in Summer I, 2022. Thesis title: *Estimation of Coefficient of Variation under multivariate Skew Normal Settings*. Dr. Z. Wang is a Tenure-Track Assistant Professor, University of Wisconson-Oshkosh, USA.

- Ph.D. thesis supervision of Cong Wang. Ph.D. completed in Spring 2020. Thesis title: *Extending A Priori Procedure for Estimating Parameters under Skew Normal Settings*. Dr. C. Wang is an Assistant Professor (up for promotion this year) at University of Nebraska-Omaha, USA.

- Ph.D. thesis supervision of Ziwei Ma. Ph.D. completed in Spring 2020. Thesis title: *Inference on location parameters and decomposition of quadratic forms under multivariate skew normal settings*. Dr. Z. Ma is an Assistant Professor (up for promotion this year) at The University of Tennessee at Chattanooga USA.

- Ph.D. thesis supervision of Xiaonan Zhu. Ph.D. completed in Spring 2019. Thesis title: *Sampling distributions in the family of skew normal distributions and association measures of Copulas*. Dr. X. Zhu is an Associate Professor at University of North Alabama, USA.

- Ph.D. thesis supervision of Weizhong Tian. Ph.D. completed in Spring 2016. Thesis title: *Distortion risk measures and multivariate distributions based on skew normal settings*, Ph.D. completed in Spring 2016. Dr. W. Tain is an Associate Professor at Shenzhen Technology University, China.

- Ph.D. thesis supervision of Zheng Wei. Thesis title: *Multivariate affiliation and the joint distribution of random set vectors with copulas*, Ph.D. completed in Spring 2015. Dr. Z. Wei is an Associate Professor at Texas A& M University, Corpus Cristi, USA.

- Ph.D. thesis supervision of Qingsong Shan. Thesis title: *A Measure of mutual complete dependence in discrete variables through subcopula*, Ph.D. completed in Spring 2015. Dr. Q. Shan is an Associate Professor at Jiangxi University of Economy and Finance, China.

- Ph.D. thesis supervision of Nagwa Albehery. Thesis title: *Statistical inference of poverty measures using U-Statistics, truncated distributions, and stochastic dominance approaches*, Ph.D. completed in Spring 2012.
- Ph.D. thesis supervision of Baokun Li. Thesis title: *Cochran's theorems and estimation with finite random set data*, Ph.D. completed in Spring 2006.
- Chair, Undergraduate Curriculum Committee, Graduate Recruiting Committee.
- Member, Advisory Committee, Promotion to Professor Subcommittee, Ad-hoc Com- mittee on Hiring, Tenure and Promotion to Associate Professor Committee, Graduate Studies Committee, Undergraduate Majors and Minors Committee.
- Co-writer of probability and statistics comprehensive exam, organizer and participant in statistics seminar.

Statistical Consultant: In the past 32 years, I have done statistical consulting work voluntarily for New Mexico State University faculty members and graduate students from Department of Computer Science, Industrial Engineering, Electric Engineering, Biology, chemistry, Home Economics, Psychology, Astronomy, and Agricultural Economics.