

Dr. Peng Zhong

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Education

King Abdullah University of Science and Technology	Saudi Arabia
PhD in Statistics	2019 – 2022
Advisor: Prof. Raphaël Huser	
King Abdullah University of Science and Technology	Saudi Arabia
MS in Statistics	2017 – 2018
Advisor: Prof. Raphaël Huser	
Southern University of Science and Technology	Shenzhen, China
BA in Financial Mathematics	2013 – 2017

Honors & Scholarships

National Encouragement Scholarship (SUSTech)	2015
Establishment of SUSTech Scholarship (SUSTech)	2013

Publications

- [1] **Peng Zhong**, Raphaël Huser, and Thomas Opitz, **Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude**, *Annals of Applied Statistics* **16**, 272-299, 2022
- [2] **Peng Zhong**, Raphaël Huser, and Thomas Opitz, **Exact simulation of max-infinitely divisible processes**, *accepted in Econometrics and Statistics*, 2022
- [3] Zhongwei Zhang, Elias Krainski, **Peng Zhong**, Håvard Rue, and Raphaël Huser, **Joint modeling and prediction of massive spatio-temporal wildfire count and burnt area data with the INLA-SPDE approach**, *Submitted to Extremes*
- [4] Raphaël Huser, Michael Stein, and **Peng Zhong**, **Vecchia likelihood approximation for accurate and fast inference in intractable spatial extremes models**, *Submitted to Journal of the Royal Statistical Society: Series B*
- [5] **Peng Zhong**, Manuela Brunner, Raphaël Huser, and Thomas Opitz, **Are spatial precipitation extremes becoming more intense, wider, or both? An extreme-value statistics perspective**, *In preparation*
- [6] Yan Gong, **Peng Zhong**, Raphaël Huser, and Thomas Opitz, **Partial tail correlation coefficient**, *In preparation*

Teaching Experience

Teaching Assistant (STAT 250: Stochastic Processes), CEMSE (KAUST)	Fall, 2020
Grading homework and exams; Giving tutorial; Q & A;	
Teaching Assistant (Real Analysis), Mathematics (SUSTech)	Spring 2017
Grading homework and exams; Q & A;	

Industry Experience

CSMAR Database	Shenzhen, China
Data Analyst (Intern)	Summer 2016
Data analysis; Data scraping; Present and review literature in Finance;	

Talks & Posters

- Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude**
- Extreme Value Analysis 2021 (Virtual), UK 6, 2021
- Poster: Exact simulation of max-infinitely divisible processes**
- 13th International Workshop on Rare-Event Simulation (Virtual), Paris, France 5, 2021
- Talk: Exact simulation of max-infinitely divisible processes**
- Virtual workshop on "Statistical Estimation and Detection of Extreme Hot Spots, with Environmental and Ecological Applications", KAUST, Saudi Arabia 2, 2021
- Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude**

Virtual workshop on "Statistical Estimation and Detection of Extreme Hot Spots, with Environmental and Ecological Applications", KAUST, Saudi Arabia 2, 2021
Contributed Talk: Modeling non-stationary temperature extremes with level-dependent extremal dependence
 Joint Statistical Meetings (Virtual), USA 8, 2020
Poster: Modeling spatial extremes with max-infinitely divisible models level-dependent extremal dependence
 Joint Statistical Meetings, Denver, Colorado, USA 7, 2019

Selected Courses Stochastic Processes; Linear Models; Statistics of Extremes; Nonparametric Statistics; Time Series; Bayesian Statistics; Computational Statistics; Data Mining; Big Data Optimization; Advanced Probability; Advanced Simulation;

Skills

Programming
 R, C++, Python, Pytorch, Shell, Slurm, Singularity.

Other
 Latex, Markdown, MS Office.

Languages
 Mandarin, English

Professional Services **Journal of Multivariate Analysis** Reviewer