Peng Zhong（钟鹏）

King Abdullah University of Science and Technology (KAUST)
Computer, Electrical, and Mathematical Sciences and Engineering (CEMSE) Division, Statistics program
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EDUCATION

King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia, 2019-2022
Ph.D. in Statistics,
Dissertation Title: Modeling and Simulation of Spatial Extremes Based on Max-Infinitely Divisible and Related Processes
Advisor: Prof. Raphaël Huser

King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia, 2017-2018
MSc in Statistics,
Advisor: Prof. Raphaël Huser

Southern University of Science and Technology (SUSTech, 南方科技大学), Shenzhen, China, 2013-2017
BEc in Financial Mathematics

HONORS

Dean's List Award, CEMSE, KAUST, 2022
National Encouragement Scholarship, SUSTech, 2015
Establishment of SUSTech Scholarship, SUSTech, 2013

INDUSTRY EXPERIENCE

CSMAR DATA TECHNOLOGY, Data Analyst, Summer 2016
Data analysis; Data scraping; Present and review literature in Finance;

TEACHING EXPERIENCE

Teaching Assistant (STAT 250: Stochastic Processes), CEMSE (KAUST), Fall 2020
Grading homework and exams; Giving tutorials; Q & A

Teaching Assistant (Real Analysis), Mathematics (SUSTech), Spring 2017
Grading homework and exams; Q & A;

TALKS & POSTERS

Talk: Are spatial precipitation extremes becoming more intense, wider, or both? An extreme-value statistics perspective.
CRG Workshop (Virtual), Geneva, Switzerland, May 2022

Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude
Extreme Value Analysis 2021 (Virtual), University of Edinburgh, UK, June 2021

Poster: Exact simulation of max-infinitely divisible processes
13th International Workshop on Rare-Event Simulation (Virtual), Paris, France, May 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, February 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, February 2021

Talk: Modeling non-stationary temperature extremes with level-dependent extremal dependence
Joint Statistical Meetings (Virtual), USA, August 2020

Poster: Modeling spatial extremes with max-infinitely divisible models level-dependent extremal dependence
Joint Statistical Meetings, Denver, Colorado, USA, July 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, Keras, and Singularity
Other: Latex, Markdown, and MS Office
Languages: English and Chinese

PROFESSIONAL SERVICES

Reviewer: Journal of Multivariate Analysis (1)

PUBLICATIONS

Peer-Reviewed Papers:
[1] **Zhong P.**, Huser R., and Opitz T. (2022), Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude, Annals of Applied Statistics, 16, 272-299.
[2] **Zhong P.**, Huser R., and Opitz T. (2022), Exact simulation of max-infinitely divisible processes, Econometrics and Statistics, To appear.

Papers Under Review:
[1] Zhang Z., Krainski E., **Zhong P.,** Rue H., and Huser R. (2022+), Joint modeling and prediction of massive spatio-temporal wildfire count and burnt area data with the INLA-SPDE approach, Submitted.
[2] Huser R., Stein M., **Zhong P.** (2022+), Vecchia likelihood approximation for accurate and fast inference in intractable spatial extremes models, Submitted.
[3] Gong Y., **Zhong P.**, Huser R., and Opitz T. (2022+), Partial tail-correlation coefficient applied to extremal-network learning, Submitted.
[4] **Zhong P.**, Brunner M., Huser R., and Opitz T. (2022+), Spatial modeling and future projection of extreme precipitation extents, Submitted.