

# Peng Zhong

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**Research Interests**      Extremes; High dimensional inference; Machine learning; Nonparametric statistics

**Education**      **King Abdullah University of Science and Technology**      Saudi Arabia  
PhD in Statistics, GPA: 3.69/4      1, 2019 – Present  
Advisor: Prof. Raphaël Huser

**King Abdullah University of Science and Technology**      Saudi Arabia  
MS in Statistics, GPA: 3.72/4      8, 2017 – 12, 2018  
Advisor: Prof. Raphaël Huser

**Southern University of Science and Technology**      Shenzhen, China  
BA in Financial Mathematics      8, 2013 – 6, 2017

**Honors & Scholarships**      National Encouragement Scholarship (SUSTech)      2015  
Establishment of SUSTech Scholarship (SUSTech)      2013

**Publications**      **Exact simulation of max-infinitely divisible processes**  
Peng Zhong, Raphaël Huser, and Thomas Opitz.  
[arXiv preprint 2103.00533](#), submitted, 2021

**Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude**  
Peng Zhong, Raphaël Huser, and Thomas Opitz.  
*Annals of Applied Statistics*, [to appear](#), 2021

**Inference for max-stable processes based on the Vecchia approximation**  
Raphaël Huser, Michael Stein, and Peng Zhong.  
*In preparation*

**Are spatial precipitation extremes becoming more intense, wider, or both? An extreme-value statistics perspective.**  
Peng Zhong, Manuela Brunner, Raphaël Huser, and Thomas Opitz  
*In preparation*

**Partial tail correlation coefficient**  
Yan Gong, Peng Zhong, Raphaël Huser, and Thomas Opitz  
*In preparation*

**Joint modeling of massive spatio-temporal wildfire count and burnt area data with the INLA–SPDE approach**

Zhongwei Zhang, Elias Krainski, Peng Zhong, Håvard Rue and Raphaël Huser.  
*In preparation*

**Teaching  
Experience**

**Teaching assistant, CEMSE (KAUST)** Fall, 2020

STAT 250: Stochastic Processes

Grading homework and exams; Giving tutorial; Q & A;

**Teaching assistant, Mathematics (SUSTech)** Spring 2017

Real Analysis

Grading homework and exams; Q & A;

**Industry  
Experience**

**CSMAR Database** Shenzhen, China

Data Analyst (Intern) Summer 2016

Data analysis; Data scraping; Present and review literatures in Finance;

**Talks & Posters**

**Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude** 6, 2021

Extreme Value Analysis 2021 (Virtual), UK.

**Poster: Exact simulation of max-infinitely divisible processes** 5, 2021

RESIM 2021: 13th International Workshop on Rare-Event Simulation, Paris, France (Virtual).

**Talk: Exact simulation of max-infinitely divisible processes** 2, 2021

Virtual workshop on "Statistical Estimation and Detection of Extreme Hot Spots, with Environmental and Ecological Applications", KAUST, Saudi Arabia.

**Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude** 2, 2021

Virtual workshop on "Statistical Estimation and Detection of Extreme Hot Spots, with Environmental and Ecological Applications", KAUST, Saudi Arabia.

**Contributed Talk: Modeling non-stationary temperature extremes with level-dependent extremal dependence** 8, 2020

Joint Statistical Meetings (Virtual), USA.

**Poster: Modeling spatial extremes with max-infinitely divisible models level-dependent extremal dependence** 7, 2019

Joint Statistical Meetings, Denver, Colorado, USA.

## **Skills**

### **Programming**

R, C++, Python, Shell, Slurm.

### **Other**

Latex, Markdown, MS Office.

### **Languages**

Mandarin, English

## **Professional Memberships**

**American Statistical Association (ASA)**

Regular Member