### Peng Zhong

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

statistics

Education King Abdullah University of Scicence and Technology Saudi Arabia

PhD in Statistics, GPA: 3.69/4 1, 2019 – Present

Advisor: Prof. Raphaël Huser

King Abdullah University of Scicence 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 &National Encouragement Scholarship (SUSTech)2015ScholarshipsEstablishment 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 literature 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