



## Einladung zum Vortrag

von

**Dr. Stefanie Schwaar**  
TU Kaiserslautern

### **Randomized weight functions in change-point tests and estimators**

In change-point analysis the point of interest is to decide if the observations follow one model or if there is at least one point in time, where the model has changed. This results in two subfields, the testing of a change and the estimation of the time of change. This talk considers both parts but with the restriction of testing and estimation for at most one change-point model (AMOC model).

A well-known example is based on independent observations having one change in the mean, so called AMOC mean change model. Based on the likelihood ratio test a test statistic with an asymptotic Gumbel distribution was derived for this model. As it is a well-known fact that the corresponding convergence rate is very slow, modifications of the test using a weight function were considered. Those tests and the corresponding estimators have a better performance. But no weight function performs uniformly better than the others. To overcome this problem, a randomized weight function is introduced.

**Termin: Mittwoch. 15. November 2017, 14 Uhr c.t.**

**Ort: Universität Ulm, Helmholtzstr. 18, Raum 220**

Interessenten sind herzlich eingeladen.

Der Vortrag findet im Rahmen des Forschungsseminars des Institutes für Stochastik statt.

gez. E. Spodarev