



Universität
Bremen



Wintersemester 26/27

Einladung zum ZeSOB Kolloquium

Am Montag, 19. Oktober 2026, um 16:30 Uhr spricht

Prof. Dr. Jens Klooster

(Rijksuniversiteit Groningen)

über

On inference using M-estimators under contamination

We analyze inferential properties of several popular robust location-scale M-estimators in a contamination model where h uncontaminated standard normal observations are generated first and $n-h$ outliers are subsequently added outside their range. We establish an inferential theory for Tukey's biweight estimator and show that this estimator can nearly attain the performance of the infeasible average of the h uncontaminated observations in terms of consistency, efficiency and local power. In contrast, non-re-descending M-estimators, such as the median and Huber estimator, are generally bounded but inconsistent for the uncontaminated location, making valid inference challenging for such estimators.

Der Vortrag findet am Montag, 19. Oktober 2026, um 16:30 Uhr im Raum 0-C001 im Gebäude V03 am Campus Haarentor¹ der Universität Oldenburg, Ammerländer Heerstraße 138, 26129 Oldenburg statt. Parallel streamen wir den Vortrag über BBB unter

<https://meeting.uol.de/b/pet-ihv-p2z-min>

Alle Interessierten sind herzlich willkommen!

(Einladungsvorschlag von Prof. Dr. Peter Ruckdeschel)

¹ Siehe auch <https://uol.de/campus-haarentor>