



11.08.2019

Einladung
zum
Oberseminar „Stochastik“

am **Donnerstag**, dem **26.09.2019**, um **14:00 Uhr** im **Seminarraum 1 (Raum 005)** der
Abteilung Mathematik, Weyertal 86-90, 50931 Köln.

Es spricht

Prof. Dr. Marie Hušková
(Karls-Universität Prag)

zum Thema:

Specification testing in nonparametric AR-ARCH models

Abstract: In the talk an autoregressive time series model with conditional heteroscedasticity is considered, where both conditional mean and conditional variance function are modeled nonparametrically. Tests for the model assumption of independence of innovations from past time series values are suggested. Tests based on weighted L^2 -distances of empirical characteristic functions are considered as well as a Cramér-von Mises type test. The asymptotic distributions under the null hypothesis of independence are derived and consistency against fixed alternatives is shown. A smooth autoregressive residual bootstrap procedure is suggested and its performance is shown in a simulation study.

Joint work with N. Neumeier, T. Niebuhr, L. Selk (Hamburg University)

Alle Interessenten sind herzlich eingeladen.

Die Dozenten der Stochastik