Asymptotic Theory

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Schedule

- Lecture and tutorial in English
- Modules: MS 6/7, MD E1, mandatory for Econometrics
- 4+2 format in the second half of the semester (starting 1st of December)
- In total: 2+1, 4.5 CP
- Lecture times: Wed 12:15-13:45; Thu 14:15-15:45 (CDI 120)
- Tutorial times: tbd
Procedure

- Exercise sheets every week - rated for an honest attempt
- Take-home assignment at the end of the semester
- Currently planned: 3 honest attempts and 40% points in the assignment necessary to be eligible for the exam
- Module exam will be a written exam (60 minutes) in English
- Moodle room password „CLT“:
  https://moodle.tu-dortmund.de/enrol/index.php?id=36210
Contents

- Probabilistic types of convergence – almost surely, in probability, in distribution
- Landau symbols for probabilistic convergence
- Lemma of Borel-Cantelli
- Laws of large numbers
- Central limit theorems
- Delta Method
- CLT for martingale difference sequences
References

Questions?

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