Universität Bonn
Sommersemester 2026

Institut für Angewandte Mathematik
Johannes Alt

Graduate seminar on Probability Theory: Log gases and random matrices

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Organisational comments

Registration

- Contact Johannes Alt via email until February 12, 2026 to register definitely for a talk in this seminar. Please mention your study program (e.g. master mathematics), your master semester, and which of the following courses you have attended:
measure theory (Analysis III), measure-theoretic probability theory, stochastic analysis, stochastic processes, complex analysis, a course on random matrices.
- After February 12, 2026, the talks will be distributed. The speakers will be informed via email about the contents of their talk.
- Some talks might still be available after February 12, 2026. Please contact Johannes Alt via email if you are interested.
- In addition, registration on basis is necessary prior to the student's talk and, in any case, between April 1, 2025 and April 30, 2026!

Attendance

- The attendance of each talk by each student is mandatory and will be checked.
- In case of absence, contact Johannes Alt prior to the seminar via email and provide an important and valid reason for the absence.

Talk preparation

- Each talk will last 90 minutes and should aim at presenting the contents (in a lecture style) to the other students. A blackboard talk is strongly recommended. Please practice the talk before your presentation.
- For each talk, the speaker should prepare a short **handout** containing the most important statements and definitions of the talk.
- For some talks, the duration of 90 minutes might not be sufficient to present all details. While all definitions and statements should be stated clearly, in order to fit the contents into the 90 minutes, for some proofs only a sketch of the core steps might be presented.
- Sometimes it is helpful to recall some statements from previous talks.

- The speaker should contact Johannes Alt at the latest three weeks before their talk to arrange a meeting. During that meeting, it will be checked that the speaker is on track for presenting a complete and comprehensive talk. The speaker should decide before the meeting which statements and definitions will appear on the handout.

Grade

- The grade is based on the mathematical quality of the talk as well as the quality of its presentation.
- The speakers will be informed about their grades as soon as all talks have been presented.