ETH zürich

Probability Group
ETH

# Student Seminar in Probability Theory

**I. Kortchemski, F. Severo**

Spring Semester 2024

# General information

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- Topic: *Random graphs*
- References: mainly lecture notes on random graphs available online (by Nicolas Curien and Sébastien Roch) and "Random Graphs and Complex Networks " by Remco van der Hofstad (Cambridge University Press, 2017 available online
- Time: Thursdays, 12:15-14:00.

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- Introduce the relationship between number theory and probability theory. Use probabilistic tools and methods to study prime numbers.

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  - Participants come well prepared.
  - Clarification of questions, discussion of the talk's structure, and exchange about intuition.

# Semester plan (tentative)

| Week(s) | Date | Talk |
|---|---|---|
| 0 | Feb 22 | Introduction (I. Kortchemski) |
| 1 & 2 | Feb 29 & Mar 7 | Pair 1 |
| 3 & 4 | Mar 14 & 21 | Pair 2 |
| 5 & 6 | Mar 28 & Apr 11 [1] | Pair 3 |
| 7 & 8 | Apr 18 & 25 | Pair 4 |
| 9 & 10 | May 2 & 16 [2] | Pair 5 |
| 11 & 12 | May 23 & May 30 | Pair 6 |

[1] Apr 4: Easter break

[2] Mai 9: Ascension day

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- Active participation to the seminar.
  - read the material in parallel to the talks.
  - ask questions during the talk of your colleagues.

# Selection procedure

If you are interested in participating, two actions required:

(1) Send an email to Marion Allemann-Kodlinsky marion.allemann@math.ethz.ch before January 8 with the following information:
   - indicate your previous courses in the field of probability
   - explain in a few lines that explain why you are interested in attending the Student Seminar in Probability Theory.

(2) Parallel enrollment via myStudies (opens on January 1).

- Confirmation of participation: mid-January.
- More detailed presentation of the talks, pairing and distribution of first talks: meeting on January 25.