

Information Theory II

Spring Semester 2021

Prof. Dr. A. Lapidoth / Prof. Dr. S. Moser

Signal and Information
Processing Laboratory

Institut für Signal- und
Informationsverarbeitung



Information about the Course

<http://www.isi.ee.ethz.ch/teaching/courses/it2.html>

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Lectures / Tutorials Thursdays, 2.15 – 6.00 pm via Zoom. **The Zoom link to both the lectures and tutorial sessions will be sent out by email at the beginning of the course.**

Prerequisites

- Solid foundation in probability and calculus
- Pleasure with mathematics
- English (lectures and tutorials are in English)
- Information Theory I

Lecture Notes

Thomas M. Cover and Joy A. Thomas: *Elements of Information Theory*, 2nd Edition, John Wiley & Sons, 2006.

Tutorials

The assistant explains and provides hints for the weekly homework exercises. Exercises may be handed in one week after the assignment (no Testat).

Exam

The exam is oral (30 min, in English).

Supplementary Literature

- Stefan M. Moser: *Information Theory (Lecture Notes)*, 6th edition, 2020.
- Stefan M. Moser: *Advanced Topics in Information Theory (Lecture Notes)*, 4th edition, 2020.
- Abbas El Gamal and Young-Han Kim: *Network Information Theory*, Cambridge University Press, 2011.
- Gerhard Kramer: *Topics in Multi-User Information Theory*, Foundations and Trends in Communications and Information Theory, vol. 4, no. 4–5, pp. 265–444.