Information Theory and Coding

Time and Location:
- Mondays, 11-13, BC 01 (lecture)
- Tuesdays, 13-15, ELA 2 (lecture)
- Tuesdays, 15-17, ELA 2 (exercise)

Instructor:
- Emre Telatar (INR 117, 37693, emre.telatar@epfl.ch)
- Office Hours: By appointment

Teaching Assistants:
- Yunus İnan (INR 033, 36604, yunus.inan@epfl.ch)

Administrative Assistant:
- Muriel Bardet (INR 147, 37695, muriel.bardet@epfl.ch)

Pre-requisites:
- Probability and Statistics (I and II) or Stochastic Processes for Communications

Web page: http://ipg.epfl.ch


Course Mechanics:
- Weekly Assignments
  - One graded homework (date TBA, 10%)
  - Midterm Quiz (40%)
  - Final Exam (50%)

Approximate Outline:
- Properties of information measures (4-5 lectures)
- Source coding (7-8 lectures)
- Capacity and the channel coding theorem (5-6 lectures)
- Coding techniques for reliable communication (4-5 lectures)
- Multi-user channels (4-5 lectures)
- Additional topics (1-2 lectures)

Reference Material: