Projects

Instructions

Format: You shall defend one article of your choice, individually or by pair (in English or in French, the clarity of the defense is the key element to focus on).

Length: The exam consists of ~ 20mn of autonomous presentation, and ~ 10mn of questions from the jury

⚠ 20 minutes is really short for a presentation: try several rehearsals before the defense ⚠

Presentation: Free style (slides, blackboard, or both). If you use slides, export it to `pdf` send it to a jury member the day before the exam.

What to do:
- Read your article, draw links with the results seen in class, and explain at least one of its main results. The exposition of the article does not need to be exhaustive (since you have only 20 min of presentation, editorial choices have to be made: for instance heavy notation are proscribed, as auxiliary results).
- Discuss these results (optimality, computational complexity, importance of certain assumptions, ...)
- Your presentation should include at at least one proof (or idea of proof) of a main technical ingredient of the result.
- If relevant, feel free to simplify the result/proof and to consider particular cases that would help understand the big picture.
- Do not hesitate to perform numerical experiments.
- In any way possible, your presentation must show that you have understood the impact of the article, and the key steps and techniques in the proofs.

Grade:
- Presentation form (~ 7 points)
  - quality of the slides/blackboard management
  - presentation structure (introduction, context, problematic, main result, numerical XP, discussion)
  - oral skills, clarity of the speech
- Presentation content (~ 7 points)
  - Mathematical rigor
  - Link with the lectures
  - Hindsight about the presented concepts
- Questions (~ 6 points)