Read/write/present scientific papers

- ◆ The basis of the work of any researcher
 - M2R student, PhD student, experienced researcher
- ◆ Research: a collective activity in which everyone brings his/her own « small » contribution to the whole picture
- ◆ Goal of a oral or written presentation of a research work
 - Provide a good understanding of the problem which is addressed and of the different issues that are raised and studied in the work
 - Provide a good analysis and synthesis of the existing work related to the subject
 - Provide a self-contained description of the proposed solution showing its novelty or its advances w.r.t previous attempts for solving the problem
 - Outline and discuss the validation of the proposed solution (may be exprimental or theoretical)

Goals of the oral presentation

- ◆ Presentation of the research motivations (for the article)
 - State the objectives of the article in the domain (state of the art)
 - Analyse the links between the article and the domain (references)
 - understand how scientific results are propagated and reused
- ◆ illustration of the technical content on an example of your own,
 - Expand algorithms with examples
 - Illustrate a method by making more explicit each step of the method
- ◆ overview of the scope of the article by briefly summarizing how the article under review is cited in other articles
 - use your critical mind.

Good advice for the oral exam

- ◆ **Do not** summarize the paper as an english exercise
 - do not paraphrase the authors (neither their sentences nor their algorithms or theorems)
 - do not necessarily follow the plan of the paper to structure your talk
 - do not go into technical details if not necessary
- ◆ **Do** appropriate the work to better explain it (as if it were your work or a work central to your own research)
 - use your words to explain what you understood
 - be critical, but in a well-founded way
 - be pro-active: search and read additional related papers if it helps you to better understand (the scope of) the contributions
 - be synthetic: extract the core ideas and results
 - be illustrative: use (your) examples to explain an algorithm or a method

Possible outline of your presentation

- General setting: the problem which justifies the study reported in the paper
 - use your words to explain it to your friends who are not specialists in the domain
- ◆ The specific sub-problem studied in the paper
 - idem
- ◆ Interest of studying this specific problem w.r.t to the general problem
 - idem
- ◆ Main results of the paper
 - Sketching the different contributions
 - Per contribution summarizing the results and their scope
- ◆ Positioning of those results w.r.t existing work
 - Critiques will be based on evidence and your own reasoning
- **♦** Perspectives
 - Summarize and evaluate the article

How when where

- ♦ 8 groups of 3 persons + 1
 - 2 groups (GC+DL), 2 groups Time, 4 groups Bayesian networks
 - 1 special session (1 student)
- ◆ Make group of 3 students (this week before Nov 13) send your group names to Danielle Ziébelin and Olivier Aycard : <u>Danielle.Ziebelin@imag.fr</u> and Olivier.Aycard@imag.fr
- ◆ The paper will be given to you: Nov 13 (no choice, but you can exchange with an other group)
- ◆ Working session : Dec 18
- ◆ Presentation : Jan 8 or Jan 14 (To be defined)
 - Presentation (pdf) will be send to professors before Jan 7 or 13, 5pm
 - 30 mn of presentation per group, 15 mn of questions

5