Seminar Information

- **Goal:**
  Learn *how to understand* and *present* research results in the area of formal methods.

- Seminar webpage on TISS – *check it* for updates
Seminar Organization

- October 23, 2:15pm, FM Seminar:
  - Overview;
  - Proposed papers are listed online;
  - Guidelines on giving talks

- November 6:
  - Student’s deadline for choosing a paper (decision to be mailed to L. Kovács);
  - Paper assignments will be published online;

- November 2024:
  - Contact lecturer and read assigned paper;

- December 4-15:
  - Mandatory meeting 1: discussion of the paper and its draft presentation;

- January 15-19:
  - Mandatory meeting 2: discussion of the paper and its presentation;

- January 25-31 – exact dates TBD:
  - Final presentation, attendance required, Q&A encouraged
Seminar Requirements

- **Read and understand** the research paper, including related works.
  - Impact, significance and originality of results
  - In-depth presentation of technical contributions
  - Relation and improvements on the state-of-the-art

- **Two mandatory meetings** with lecturers to discuss the paper and its presentation draft;

- **Oral presentation** on the assigned research paper:
  - 1/4 of the presentation: *popular-science style talk* on the importance and impact of the papers on society and research community;
  - 3/4 of the presentation: *scientific talk* on the technical contributions of the papers

- **Active participation** during the oral presentations.
Guidelines on

How to give the FM Seminar Talk
How to Give the FM Seminar Talk?

Structure of the Talk
Formatting Guidelines
Giving a Talk
Guidelines for Preparing the Talk

Part 1: Popular-science style talk

Part II: Scientific talk
Guidelines for Preparing the Talk

Part 1: Popular-science style talk

- Highlight the **relevance**: impact on society and scientific community;

- Clarify the **goal**: present the topic in general;

- Think of the **audience**!
  (professional background, age, not much formal methods/math expertise, etc. )
  - Does not know the specific research topic;
  - Knows very little about computers, likely nothing about computer science;

- Underline general **advantages/disadvantages**.
Part II: Scientific talk

- Clarify the results: list the main research results;

- Think of the audience!
  (professional background, age, formal methods/math expertise, etc.)
  - Knows foundation of computer science;
  - Does not know the specific research topic;

- Focus on concepts, not details;
  but master the details, if asked!

- Underline scientific advantages/disadvantages.
Structure of the Talk

- Title of the Talk
- Details on paper authors
- Your name and affiliation

- Overview
  1. Motivation
  2. The problem
  3. Results
  4. Experiments
  5. Related work
  6. Conclusion

- Problem
  - Main results
  - Examples
  - Evaluations

- Conclusion
  - Important problem
  - Good approach (why)
  - Techniques

Popular-science

Important

Truly scientific

very important

Popular-science
Colors

- Avoid too many colors;

- Background colors:
  - Yellow, Orange, Green, Light blue

- Text colors:
  - Dark Blue, Magenta, Red, Dark Green, Fuchsia

- Avoid distracting backgrounds!  Why?—see next slides!
IDEA:
Model the System *Formally* (logic and automata)
Slide Layout

- Do not overload slides;

- Use little text, keep text in one line;

- Use diagrams and flowcharts;

- Keep as simple as possible and as complicated as necessary!
What about the people in the back row?!
Formulas

- Use **only when needed**, do not overload;

- Use **descriptive variable names**:

\[ v = \frac{d}{t} \rightarrow \text{velocity} = \frac{\text{distance}}{\text{time}} \]

- Consider Powerpoint’s equation editor vs **\LaTeX**
Guidelines for Giving the Talk

Contact with the Audience

- Establish contact between yourself and the audience;
- Look at the audience (and not to the walls);
- Devote your attention to the entire audience, not just one person;
- Do not speak with slides / beamer / blackboards!

Speak to the audience!
Guidelines for Giving the Talk

Presenting Slides

- Dedicate at least **two minutes per slide**;
  - Cut the number of slides if time is not enough;

- Keep **introduction and motivation** short;

- Do not spend too much time on the talk’s **outline**

- Allow more time for **complex topics**:
  - Repeat if really important;
  - Use examples (a running example/more examples)!
Guidelines for Giving the Talk

Before Starting Your Talk

▶ Check whether the beamer is all right (wrt your presentation);

▶ You and/or beamer should not hide projected slides.