**ETH** zürich

# How to give good seminar presentations – some hints

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#### Good seminar presentations – why should we care?

- Presentation skills are required in professional life
  - Present yourself, your research, your company, an idea, a product...
  - You are often (implicitly) evaluated based on a presentation
- In the context of this seminar, learn how to present scientific content
- Also learn
  - How to digest different knowledge sources and make a consistent picture out of it
  - To present the result in a structured way, adequate for the audience
  - To make and defend your point in front of a group

# The 80-20 rule of presentations

- 80% presentation, 20% content?
  - No!
- Clearly, content is crucial
- But content does not get through if presentation is
  - Confusing
  - Boring
  - Too advanced (or too easy) for the audience
  - Too long (or too short)
  - • •

# **Outline of this talk**



- Preparing the slides
- Giving the presentation

#### **Goal: Maximize benefit for the audience**

- Consider structure, layout, design of the presentation
- What can be assumed the audience knows? What can't?
- How can we arouse interest in the audience?
- Maximize knowledge transfer

Think of your audience – assume you are part of it

### When preparing a talk...

- For whom is the presentation?
  - Target audience, knowledge, expectations
- What is the message you want to convey?
- What is the purpose of your presentation?
  - Teach, inspire, sell, convince,...?
- What (technical) equipment do you have available?
  Room, projector, blackboard, light, ...

• In the context of this seminar, the answers should be given!

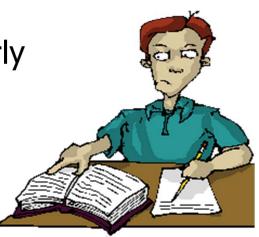
### **Academic presentations**

- Limited time (e.g., 20, 30, or 45 minutes)
  - Fix your milestones
  - Know when you should be where in your talk
  - Be prepared to questions from the audience delaying your talk
  - Be ready to shorten your talk dynamically
- Message
  - A novel scientific result, a report on your and/or others' work
  - Make clear what is your contribution and what is general knowledge or results achieved by others



## Plagiarism

- Make a clear difference between your results and those of others
- Report all references and cite them properly
  - Briefly in the talk, but fully in the written report
- Plagiarism has many forms
  - Copy & paste without explicit citation
  - Paraphrase of text without reference
  - Unacknowledged adoption of ideas, structure, design, ...



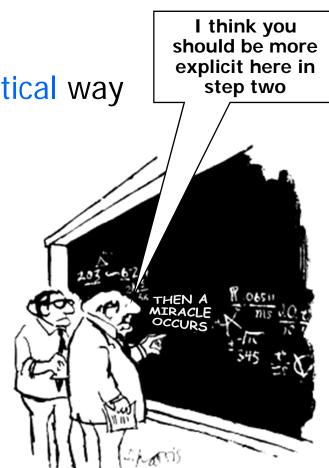
# Keep your presentation prosaic, objective, factual

- Convince with arguments, not with rhetoric
- You are not a salesperson

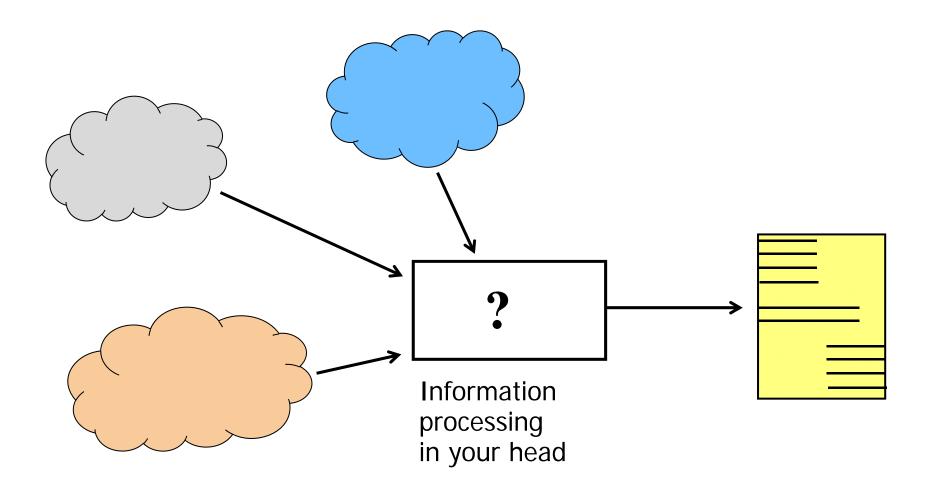


# Academic presentations (II)

- Try to convince, not to persuade
- Read and use the literature in a critical way
  - The authors are *almost* always right
- Read and use different references
  - Typically, scientific articles are more reliable than information on the Web
- You should understand 100% of what your are saying

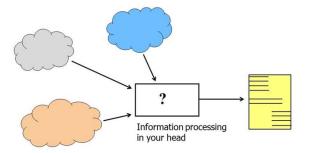


## Intellectual challenge and clarity of thought



# Information *processing*

- Use your own words
  - Do not paraphrase or just translate from other languages



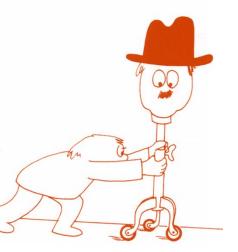
- Be careful with foreign languages
  - E.g., "Operating system" (EN) → Betriebssystem (DE)
    - not: Operationssystem
- Focus on relevant aspects
  - Identification of the relevant aspects is the most important point
  - But give additional information or go into details when appropriate
- Avoid abbreviations and acronyms whenever possible

# **Preparation**



- Observe and evaluate other speakers
  - Do they do it well? Why? How?
  - Practice your talk

- Under realistic conditions
- Test your presentation
  - Animations, colors, ...
- Know your audience
  - Competences, expectations
- Dress properly



# Preparation (II)

- Complete your preparation on time
  - Not just the night before...
- Be on time the day of the presentation
  - Take some time to check projector and laptop configuration
  - What if something does not wok?
- Be prepared for spontaneous drawings
  - Clean the blackboard
  - Make sure chalks / markers are available

#### Be prepared to questions and discussion

- Allow time for it
- Your answers should show that you are competent
  - How you reply to questions could be an important issue when your talk is used to evaluate you (e.g., as part of a job interview)



# Outline

- Basics
- Preparing the slides



Giving the presentation

# **Slide layout**

- Rule of thumb: only one train of thoughts per slide
  - Bullet points / key phrases instead of complete sentences
- Slide title should summarize the content of the slide
  - In a meaningful and self-contained way
  - Sometimes people only read the title of a slide
     (→ newspaper headlines)
- For academic presentations avoid logo, name, date, etc. on every slide
  - This is not a sales pitch
  - Adds background noise
  - Risk of drawing off attention from content
  - But: Corporate design?

# Slide layout (II)

#### Font

- Sans serif (e.g., "Arial" or "Tahoma"), not such a font
- Do not mix (too many) different fonts (size / style) on a slide

#### Font size

- Must be "big enough" (rule of thumb?)
- 12pt, 16pt, 18pt, 20pt, 24pt, 28pt

#### Bullet points

Do not "exaggerate" (no more than ~7 main items per slide)

# Slide layout (III)

- Avoid overloading your slides
  - Not meant to provide full content
- Be careful (and frugal) with animations
- No point in quickly browsing through slides one has not enough time for presenting

#### Images, plots, and diagrams instead of text

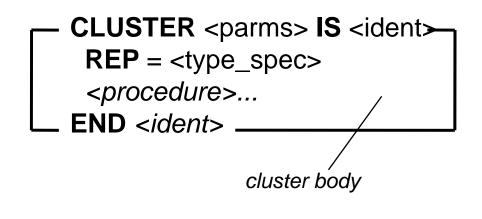
- "A picture is worth a thousand words."
  - But avoid too striking pictures (unless you want to shock / provoke your audience)
- Plots / diagrams must help you in making your point
  - They must be easy to explain / understand
- Photographs convey emotions, graphics and drawings convey exactness



#### Schemes and graphics, an example

A cluster has the following form:

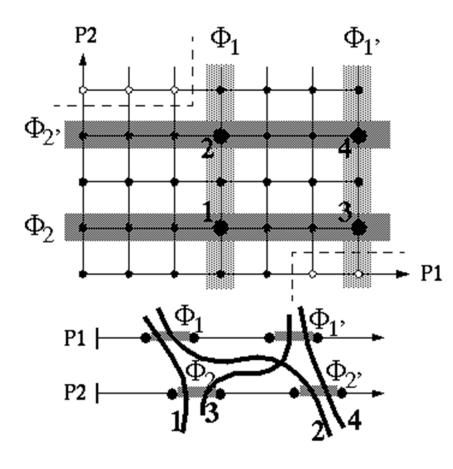
ident = CLUSTER [parms] IS ident
 cluster\_body
 END ident
 cluster\_body = REP = type\_spec
 routine {routine}

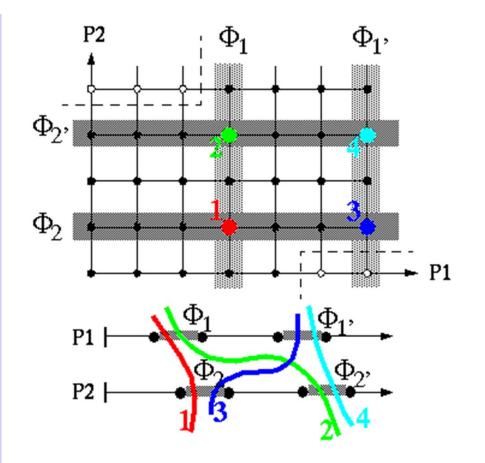


Much better:

- Striking
- Less text
- Less forward references

#### The power of colors





# Outline

- Basics
- Preparing the slides
- Giving the presentation



### Start with an outline of the talk?

- A matter of taste
- Do not spend too much time explaining the outline
  - High risk of boring your audience
  - List few, self-explaining items
- A (negative) example:
  - > Introduction [Necessary?]
  - ➤ Topic 1

Subtopic 1 bla bla [Avoid nested bullet points in the outline!]

- ≻ Topic 2
- ≻…
- > Topic 7 [too many items!]
- Summary [Necessary?]

### Make a good start

- Be happy!
- Look at your audience
  - Not at slides, laptop, window, ...
  - Not at one single person (e.g., professor)
- Friendly start of the talk
  - Welcome
  - Present yourself
  - Present your topic
  - If applicable, put your presentation in context (e.g., relation to previous presentations in the seminar)



# Beware of yourself!

- Look
  - At your audience
- Speak
  - Slowly (enough)
  - Loud (enough)
  - Fluently
  - Free (do not memorize your talk!)
  - Pause if necessary or appropriate

#### Move

- Slowly (avoid hopping around)
- Use your mimic (hands / body)
- Do not stand between the projector and the projected area

# **During the presentation**

- Engage with your audience
  - Eye contact
  - Questions
  - Provocations, contradictions, surprises? (risky, but effective)
- Motivate your audience
  - Why is your presentation worth listening to?
  - Why are you worth listening to?
- Remain authentic, stay calm, be flexible
  - Be ready to react to questions, interruptions

#### Almost done

- Do not leave important questions unanswered at the end of the presentation
  - Open issues should be explicitly addressed (e.g., future work)
- Provide a summary of the main message of your presentation
  - Try to close the circle: link the results at the end to the motivating questions at the beginning
- Make clear that the end of the talk has come
  - Keep on looking at the audience
  - Thank and the audience
  - Ask for questions

# Summary

- Understand your topic
- Be well prepared
- Structure and balance your talk well
- Think of your audience
- Keep the time
- Stay calm, be flexible
- ... and it will be a great success!!

# How to give good seminar presentations – some hints

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Pictures from: www.leander.lib.tx.us/ LILT/citing and www1.ku-eichstaett.de/PPF/PDMueller/lerntech/referat/