Oral Presentation

To prepare for your talk, I recommend to use this worksheet. I have also included the worksheet that you have already used to structure your primer talk. Depending on the feedback you received from your classmates last time, you might also want to try out something new this time!

Analogies In your project, you have worked on a topic that your classmates are not familiar with. Analogies are a powerful rhetorical device to explain an abstract idea in simple terms. They also help to make your point more relatable and hence interesting to your audience. Two examples:

Abstract concept: Solutions of the wave equation do not generally satisfy a maximum principle.
Analogy: When you jump into a swimming pool with calm water, you're initially making a 'hole' in the water surface, but the wave surrounding you will also rise above the initial water level and spill over the edges of the pool.

Abstract concept: A preconditioner P for a linear system $Ax = b$ should on the one hand approximate A as closely as possible, but on the other hand it should be easier to invert than A.
Analogy: Before a bike ride, you may want to spend some time greasing your chain so that you'll be faster, but you don't want to spend hours tuning your bike since that would kill the time advantage of a faster ride.

Pick the most important concept from your talk which is new to your classmates and come up with a real-life analogy to explain this idea.

Abstract concept:

Analogy:

Visual Aids Your presentation will become even more interesting if you sketch a graph on the board or on the document camera to illustrate a quantitative relationship, if you use a prop to explain a geometric idea or if you include a video animation of your numerical results. Your presentation will become boring and dull if you (mis)use slides as cue cards or for text, long formulas or bullet points. Keep in mind that an oral presentation should not be a voice-over for text that your classmates are reading from the screen. Instead, you should primarily communicate through your voice and body language, and use carefully selected visual aids as extra support only.

Chairing

Before the talk Find out whose talk you will introduce. Your intro should take no more than 60 seconds max. Talk to your speaker *a few days in advance of their presentation* to gather some pertinent material. Possible content for your intro:

- What qualifies them to talk about this subject?
- What motivated them to study this topic? Why do they find it interesting?
- Why should the audience care about this talk?
- What makes you curious about this presentation?

An effective technique to wrap up a speech intro and welcome up the speaker is to announce (in this order) the title, the speaker's name and then you lead the applause. This avoids any awkward moments of silence.

Example: "With 'Algebraic Flux Correction for Advection-Dominated Transport Problems', please welcome up Timm!"

During the talk Start timing (e.g. with the stop watch app on your phone) as soon as the speaker begins. Show the green, yellow and red cards (will be provided) after six, seven and eight minutes, respectively. If the speaker were to go 30 seconds overtime, stand up and move towards the front. Then, at the latest, the speaker should wrap up or else you will have to cut them off.

After the talk Invite questions from the audience, and please give highest priority to Mingfeng / Timm! Do not allow for lengthy, specialised discussions between the speaker and an audience member but politely ask them to continue their discussion one-on-one afterwards if this happens. Adjust the duration of Q&A so that your session ends on time as scheduled.

Title:

Existing Knowledge:

Point:

Purpose:

Opening

Body

Conclusion
