Meeting Notes 31.03.2022

Attendance ✅❌:

Name	abbr	attendance
Marco	forstma1	✅
Dan	hochsdan	✅
Luis	miranlui	✅
Monika	reif	✅
Stefan	brrt	❌

Notes

What we have done:

- Gobal trajectory optimization input testing, how it works, settings, etc.: https://github.com/TUMFTM/global_racetrajectory_optimization
- Started with chapter 2
- Revision of chapter 1
- Tried to get middle point of cones with different color (demo)

What we want to accomplish by next week:

- Calculate distance from middle point to border
- Integrate global trajectory into ROS project
- Work on chapter 2
- Optimize triangulation with less cones

Problems:

- If there are not a lot of cones in curve, it will “break” the algorithm

Todos:

- Change chapter title from "Theoretical Principles" to "Background"
- Better to move some information about Formula Student from chapter 1 to chapter 2

  => Explain different tracks and challenges as well
- Create a figure about the methods

  Problem => two different sides 1. Exploration (Triangulation, RRT) 2. Optimization

  Figure should give a overview of whole project, show how everything works

  => Put it at the beginning of the methods chapter
- Also create overview / figures for the algorithms => how they work

- Think about how to compare different algorithms

  => How to test and verify the algorithms? Look at precision and timing?
- Notes for Marco:
  - Update diagram with output + inner working of algorithm
  - Implement: Input transformation for algorithm (+ maybe also needed for output)
  - Maybe able to start optimizing in parts? Don't need to wait for whole track