**TEMPO Summer School on** 

# Numerical Optimal Control

University of Freiburg, August 4-13, 2014



## Welcome to Freiburg and to the Summer School!

The next 8 days we will share together in lectures, computer exercises, and social activities, with 75 participants from 11 countries. Aim is not only to study the theory, but also to learn how to practically formulate and solve optimal control problems, so the exercises lie at the center of the course. A dedicated supervision team with six teachers will help you do the exercises. We decided to only use the language Python with open-source tools (Numpy, CasADi, IPOPT, qpOASES) on your own laptops, so you can take all your computational results home after the course. The course is split into two weeks, the first week dedicated to learning the methods with existing problems, the second week to the solution of self-chosen optimal control problems in groups of 2-3 people. About 30 participants will leave us after the first week, so the supervision can be more intense in the second week. On Saturday we will organize an excursion to the black forest for interested participants. We are looking forward to an exciting and productive week together!

Moritz Diehl, Joel Andersson, Joris Gillis, Christine Paasch, Savannah Cook, Rien Quirynen, Greg Horn, and Mario Zanon

# **Public Transportation**

Public transportation in Freiburg is all run by VAG (Freiburger Verkehrs AG). The tram, bus, and subway system all have the same tickets. A one-way ticket within the city costs 2,20 EU. A cheaper option if you are planning on taking multiple trips is to buy 2x4-FahrtenKarte. This costs 15,90 EU and gives you 2 tickets with 4 rides possible on each. You must punch the Fahrtenkarte in the machine once you board the vehicle. Transfers are allowed on the same ticket within a one hour period. Tickets can be bought on buses, or at ticket machines around the city.

#### Internet

You can access the internet via eduroam or use the following login details:

WLAN-Name: NOC

WLAN-Password: thbaprkn

## Eating out

During the course most of us have lunch at the university cafeteria Mensa Rempartstraße (Rempartstraße 18, 79098 Freiburg). Here you can obtain a Mensa Card for a deposit of 7 Euros. You can top up this card with cash and use it to pay for your meal. At the end of your stay you can return the card to receive your deposit back as well as any rest amount of money that is still on your card.

Provided the wheather holds up, we are planning to meet Wednesday evening at 7:30pm in the Biergarten of the Feierling Bar and Restaurant for a few drinks and snacks. It would be lovely to see you there. Address: Gerberau 46, 79098 Freiburg.

### Contact information

Should you encounter any problems please feel free to contact Christine (+49 176 98834570) or Moritz (+49 152 22928584)

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