Welcome

Neural dynamics for embodied cognition

Virtual summer school & workshop
August 31 – September 5, 2020

Organizer, lecturer, tutor

Gregor Schöner

- Professor of Theory of Cognitive Systems
- Director of the Institute for Neural Computation
- Summer school
  - Will do most of lectures in the first days
  - Tied up in EU review meetings; videos

Organizer, lecturer, tutor

- Mathis Richter
  - Computer scientist by training
  - PhD with Gregor, finished in 2018
    - Dynamic field theory account for the grounding of language
    - Will lecture about that on Wednesday
  - Postdoc
    - Projects on mental mapping, conceptual combination (with Daniel Sabinasz)
    - DFT in spiking neurons and neuromorphic hardware (with Yulia Sandamirskaya)

Organizer, lecturer, tutor

- Jan Tekülve
  - Computer scientist
  - Last year of PhD work on intentional agents in neural cognitive architectures
    - Will lecture about this on Thursday
  - Background on movement generation in neural architectures

Organizer, lecturer, tutor

- Raul Grieben
  - Computer scientist
  - Working on PhD thesis in the domain of scene representation, visual cognition
    - Will lecture about this on Wednesday
  - Critical for further development of CEDAR
  - Developed website

Lecturer, tutor

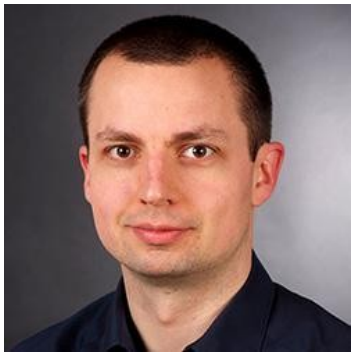
- Daniel Sabinasz
  - Computer scientist and cognitive scientist
  - Working on PhD thesis in the domain of conceptual combination; toward higher cognition
    - Will lecture about this on Thursday

Additional workshop tutors

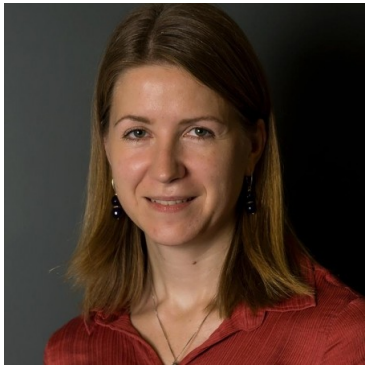
- Jean-Stephane Jokeit
- Cora Hummert
- Rachid Ramadan
- Lei Zhang
- Sophie Aerdker
- Lukas Bildheim

Guest lecturers

Quentin Houbre
Tampere University, Finland



Sebastian Schneegans
Cambridge University, UK

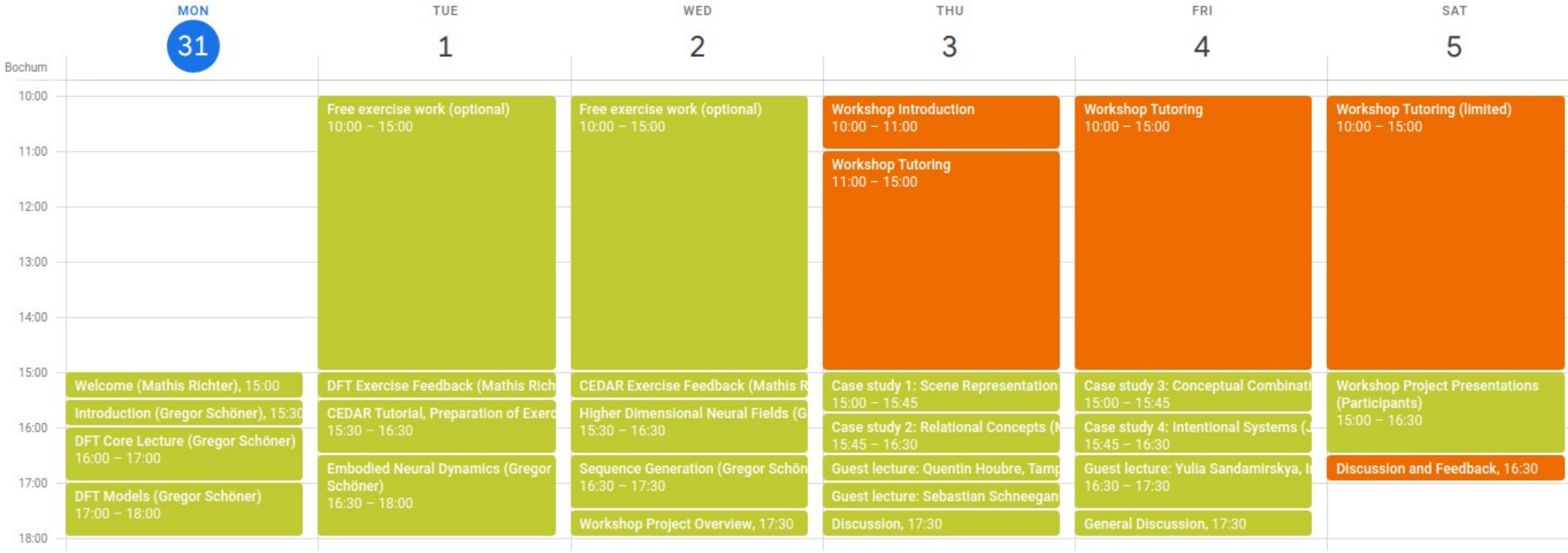


Yulia Sandamirskaya
Intel Labs, Munich, Germany

Audience

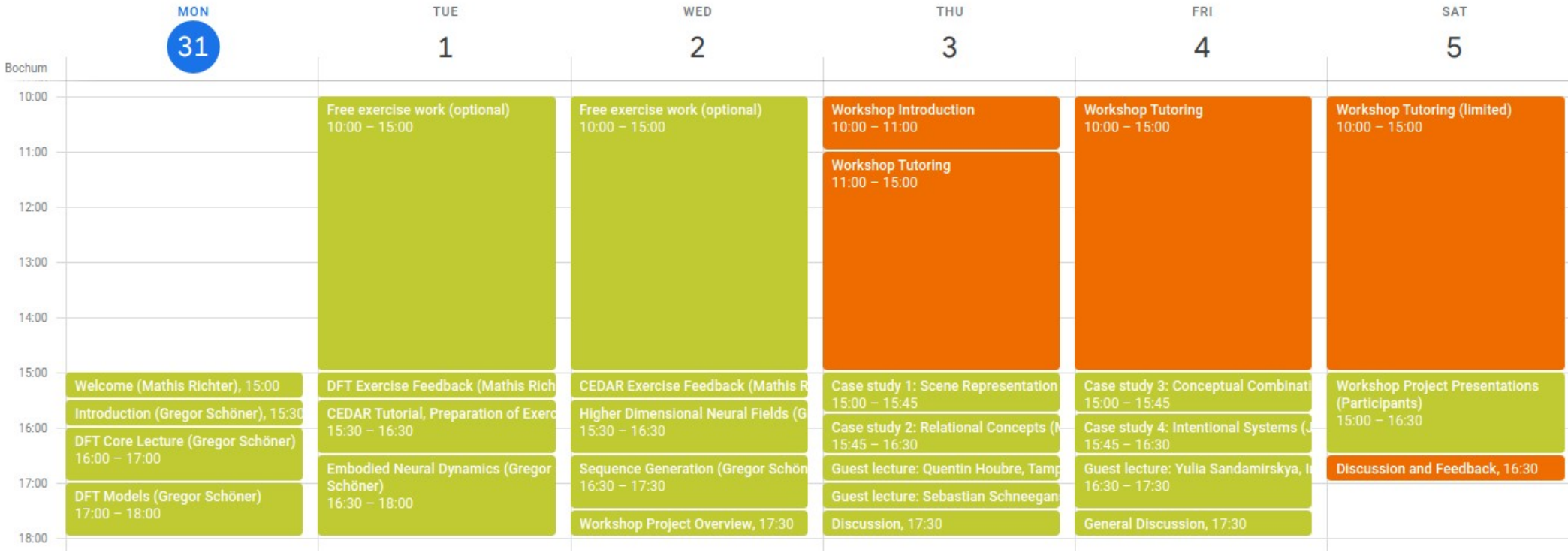
- we have around 150 registered participants
- advantage of the virtual format over the physical format
- we can usually only accommodate about 20 participants
- of course, we don’t know how many of you are really committed and able to attend and stay for the entire event

Summer school format



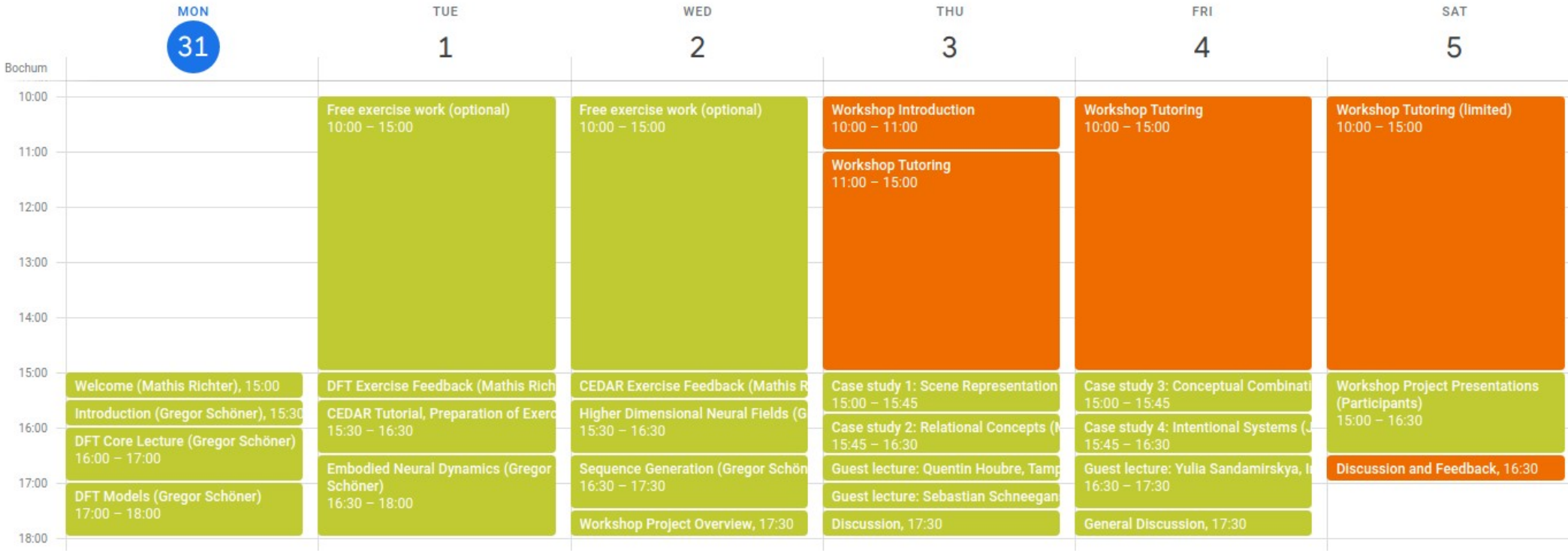
- every day we will have lectures and live interactions via this Zoom channel
- from 3 pm to 6 pm Central European Summer Time
  - morning in the US, late night in Asia
- core of the school, open to all registered users

Hands-on exercises



- you can work on these after the lectures or on the next day before the lectures
- this will happen over the first 2-3 days
- you can interact with us through the discussion form on our webpage
  - I'll show you in a moment
- we will be there and responsive right after the lectures
- and before the lectures, on the next day, all working hours of our time zone

Workshop



- the events of that part are open to everyone
- but only a selected group will get one-on-one tutoring.. .
- due to our limitations in man-power…
- Workshop introduction on Thursday morning

Website

- dynamicfieldtheory.org
- is critical for the school
- you already used it to get here
- show
  - simulator on top page
  - the school page
    - Schedules
    - Documents
    - Discussion forum

Discussions

- we encourage discussions and questions!
- additional discussion at the end of each day
  - we will remain online for a bit longer
- some talks by Gregor Schöner are in video form for logistic reasons
  - but he will always join those discussion sessions

Recordings

- we will record lectures (but not this welcome session)
  - for participants in other time zones
  - for you to revisit material
- ultimately, most of those videos will be accessibly on our webpage
- technically, they are housed on Youtube
- if you are uncomfortable with being visible/hearable… let us know
  - Turn off microphone and camera
  - Interact through chat
  - Hold back questions until the discussion at the end
  - We will eliminate those from the videos
- If you are comfortable with being recorded and on Youtube
  - Interact freely, with camera and microphone
- for the most part, only the speakers are “exposed” and those of you who are comfortable

Exercises

- Two exercise sheets
  - Website:
  - Summer school → Documents
- Both use simulators
  - Website:
    Learning DFT → Live simulators