

Welcome to the Institute for Systems Theory and Automatic Control University of Stuttgart

International Graduate School on Control 2024

Module 09

"Dissipation Inequalities and Quadratic Constraints for Control, Optimization, and Learning" (May 13 – May 17)







The University of Stuttgart is one of the leading technically-oriented universities in Germany and a member of the TU9 alliance (group of leading Universities of Technology in Germany). It enjoys an outstanding reputation around the world as a renowned research and teaching institution. Founded in 1829, it offers today 150 degree programs, including Master's courses in English, to almost 25,000 students. About 22 percent of its students are international.

The Institute for Systems Theory and Automatic Control (IST) is part of the Department of Engineering Design, Production Engineering and Automotive Engineering at the University of Stuttgart. It was founded in 1999 with the aim to specially focus on such research areas as systems theory and automatic control. Prof. Dr.-Ing. Frank Allgöwer has been holding the chair since its foundation. Prof. Andrea lannelli joined the institute in 2022.

At present, the IST comprises two professors and over 20 PhD students who receive support from additional administrative and technical staff. Their collective efforts drive both basic and applied research in the fields of automatic control and systems theory.

Excitingly, this year, the IST will host Module 09 of the EECI IGSC. Distinguished professors Prof. Murat Arcak from UC Berkeley, USA, and Prof. Peter Seiler from the University of Michigan, USA, will teach the course.







Course Location

The course will take place in one of the seminar rooms of our institute at the university campus in Stuttgart-Vaihingen (Vaihingen is one of the districts within Stuttgart).

Full Address:

Universität Stuttgart Institut für Systemtheorie und Regelungstechnik Pfaffenwaldring 9 70569 Stuttgart Seminar room Lyapunov 2.255 (2nd floor)



Main entrance to the building Pfaffenwaldring 9

The building Pfaffenwaldring 9 has a central location on the campus, across from the S-Bahn station (local tram station).

Travel Information

> How to reach Stuttgart

o By Air

Stuttgart Airport (STR)

You may take a direct flight to Stuttgart. But please be aware that some of the routes may be limited or seasonal. The airport is located near the university campus in Vaihingen, with direct connections to the campus, city center, and main railway station.

Frankfurt Airport (FRA)

Alternatively, you could fly to Stuttgart with a stopover in Frankfurt, or fly directly to Frankfurt and take a direct train to Stuttgart main station. The train journey takes about an hour and a half.

o By Train

You can also easily reach Stuttgart by train. The main railway station is conveniently located in the city center, with a direct connection to the university campus.







Tip: Frequent renovation works and strikes may cause delays and cancellations without prior notice. Download the "DB Navigator" app on your smartphone to be informed about possible current changes. You can also buy tickets for long-distance trains and local public transport (underground, tram and buses services) with this app.

o By Bus

FlixBus offers bus services to Stuttgart from various cities. It is probably the most affordable way to get to Stuttgart. You can use this <u>website</u> or the FlixBus App to find and book your tickets online. You can also check the current status of your bus and get notified of any changes or delays. The FlixBus buses usually stop at Stuttgart Airport.

> How to reach the university campus in Vaihingen

o Coming from Stuttgart Airport

You can take a direct train, the so-called S-Bahn, to the university campus in Vaihingen → S2 Schorndorf

The S2 departs ca. every 15 min. Your stop is "Universität" (an underground station). It takes 16 min. to get there.

The S2 also goes to the city center (stop "Stadtmitte") and the main railway station (stop "Hauptbahnhof").

The S-Bahn station is inside the airport building. Please follow the signs with a white "S" on a green circle to find it. It is an underground station. Please make sure to get a ticket at a ticket machine before going down to the platform.

You can also take the U-Bahn, a local tram, to the main railway station (! but not to the university campus) → U6 Gerlingen

The U6 departs every 10 min. Please note that the U-Bahn station is outside the airport building. You can follow the signs with a white "U" on a blue background to get there.

o Coming from the main railway station (Germ. "Hauptbahnhof")

Please walk to the S-Bahn station (it's in the Arnulf-Klett-Passage, an underground station). You can follow the signs with a white "S" on a green circle to find it. You may take three different trains:

- S1 Herrenberg
- S2 Filderstadt
- S3 Vaihingen







The trains depart every 10 min. Your destination is "Universität", it's the fourth stop. You'll reach it in ca. 10 min.

How to get tickets for local public transport:

You can get tickets at ticket machines or with the DB Navigator app. You cannot buy tickets on trams (U-Bahn & S-Bahn), only on buses. Stuttgart has different zones for public transport (please see the zone map under "Useful links" below). The university campus and the city center are in zone 1. The airport is in zone 2. The ticket price depends on the zone. The more zones you need, the more expensive a ticket will be.

Tip: if you use public transport more than once a day, you should better buy a day ticket (Germ. "EinzelTagesTicket). It is cheaper than buying single tickets.

How to find our institute

After getting off at "Universität", please choose the exit "Universitätszentrum" (marked on the wall). Two long flights of stairs and a short one will lead you to the surface. Please take the stairs and walk to the opposite building (Pfaffenwaldring 9).

Inside the building turn to the right. In front of the cafeteria turn left, entering a long corridor which is interrupted by a staircase and an elevator. Go to the second floor (=3rd floor according to American counting) and turn left when stepping out of the elevator. Walk along the next long corridor nearly at the end of which you will finally reach our institute turning to the right. It takes about 5 minutes to get from the underground station to our institute.

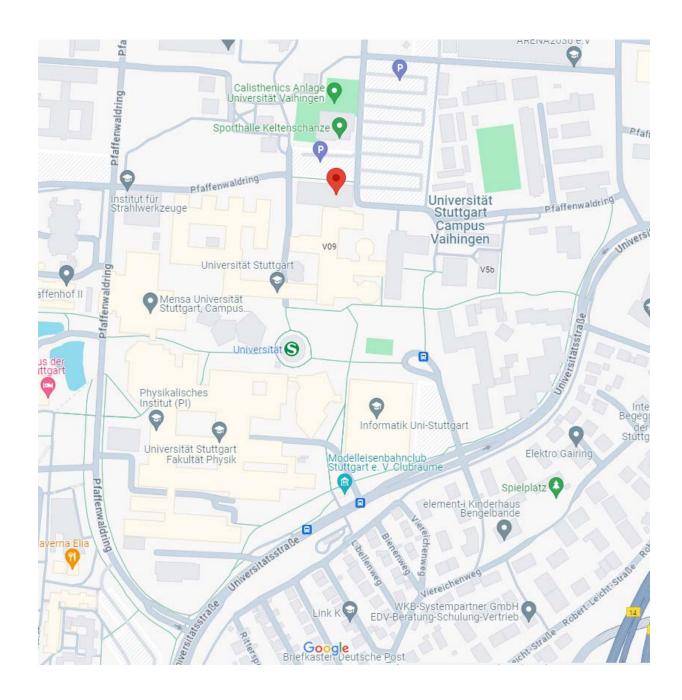
On the next page you'll find an excerpt from the campus map. You can see the location of the S-Bahn station (marked with "S"). A red pin marks the building Pfaffenwaldring 9, where our institute is located.

Also, you can find the enlarged campus map under "Useful links" below.















Accommodation

Here are some recommended hotels. Any other hotel/accommodation in the city center area or in Stuttgart-Vaihingen would also be conveniently located for the course.

- o Motel One Stuttgart-Hauptbahnhof (in the city center)
- o Motel One Stuttgart-Mitte (in the city center)
- o Ibis Styles Stuttgart Vaihingen
- o The niu Kettle (in Stuttgart-Vaihingen)
- o Römerhof Stuttgart-Vaihingen (within walking distance of the campus)
- o <u>B&B HOTEL Stuttgart-Vaihingen</u>

Useful Links:

IST homepage
Enlarged campus map
Stuttgart in general
Stuttgart tourist information
Railway network of Stuttgart
Zone map

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We are looking forward to welcoming you in Stuttgart!

! The IST celebrates its 25th founding anniversary this year. In this context we're organizing the Symposium on Systems Theory in Data and Optimization (SysDO) 2024 that takes place Sep. 30 through Oct. 2, 2024. For more details, please click here.

We would be delighted to welcome you also there.

