PROF. DR. CHRISTOPH SCHEYTT
DEPARTMENT OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY
WELCOME OF INTERNATIONAL STUDENTS
SUMMER SEMESTER 2023
Prof. Dr. Christoph Scheytt

- Head of the System and Circuit Technology group
- Research focus: Micro/Nanoelectronics, Integrated Circuit (IC) Design, Nanophotonics, Photonic IC design
- Teaching: Circuit and System Design, Wireless IC Design, Wireline Communication IC design, seminar topics, projects, master projects
- Currently Dept. Head of the Electrical Engineering and Information Technology Department and Co-Speaker of PhoQS Institute, Member HNI, Member CeOPP

If you have any question, please interrupt (raise hand, use chat, just talk)!
You? Where are you from?

- A: Europe
- B: India
- C: Asia (but not India)
- D: Other
You? What do you study?

- A: MSc. Electrical Systems Engineering (ESE)
- B: MSc. Computer Engineering (CE)
- C: MSc. Optoelectronics&Photonics
- D: Other
You? Have you been here before?

- A: Yes, in Paderborn
- B: Yes, in Germany (but not PB)
- C: Yes, in Europe (but not Germany)
- D: Nope
Outline

- City of Paderborn
- Paderborn University
- Electrical Engineering @ UPB
- Our international master programs
Paderborn - University Town with history
Paderborn today

- Population: ~150,000
- Train station (to all directions), highway connection, international airport
- **Museums:** HNF (world's largest computer museum, hosted German RoboCup), tractor museum, Kaiserpfalz museum, Diocesan Museum, Art Museum - Städtische Galerie
- **Culture:** Paderhalle music hall, New Theatre (since 2011), University Theatre "Studiobühne"
- Many **information technology companies**, most have strong connections to Paderborn University
- **Higher Education:** KatHo Catholic University, bib International College FHDW applied business college, and of course Paderborn University – overall 20,000 students
Paderborn University
"The University of the Information Society"

- 20,000 Students
- 2400 staff (50% academic)
- 250 Professors
- 800 PhD
- 50 Mio € External research funding per year
Paderborn University – Impressions (before the pandemic)
Folie in Ursprungsform bringen über Menu:
Start > Folien > Zurücksetzen

Wechsel des Folienlayouts im Menü über:
Start > Folien > Layout

Hilfslinien anzeigen über Menu:
Ansicht > Anzeigen > Führungslinien

Wechsel der Textebene im Menü über:
Start > Absatz > Listenebene erhöhen/verringern

Paderborn University – 3 locations
Paderborn University - Structure

Faculty of Business Administration and Economics

Faculty of Science

Faculty of Computer Science, Electrical Engineering and Mathematics

Faculty of Arts and Humanities

Faculty of Mechanical Engineering
Faculty of Computer Science, Electrical Engineering and Mathematics

Research Centers

- HNI – Heinz Nixdorf Institute
- PC² – Paderborn Center for Parallel Computing
- PhoQS – Institute for Photonic Quantum Systems
- IEM - Fraunhofer Institute for Mechatronic Systems Design
- ENAS-AES - Fraunhofer group for Electronic Nano Systems
- KET – Centre for Sustainable Energy
- CeOPP – Center for Optoelectronics and Photonics Paderborn

- And over forty spin-off companies, located at Technology park
Faculty of Computer Science, Electrical Engineering and Mathematics

Joint Ventures

- **C-LAB – Cooperative Computing & Communication Laboratory** – The Innovations Workshop for Atos and the Paderborn University

- **Direct Manufacturing Research Center (DMRC)** – Consortium industry partners and Paderborn University

- **It’s owl** - BMBF- Leading-Edge Cluster „Intelligent Technical Systems OstWestfalenLippe“

- **L-LAB – Research Centre for Lighting Engineering and Mechatronics.** Public Private Partnership between Hella KG Hueck & Co., Hamm-Lippstadt University of Applied Sciences and Paderborn University

- **Software Innovation Campus Paderborn (SICP)** – Research Campus of 10 partner companies and the Fraunhofer-Project Group Design of Mechatronic Systems
Faculty of Business Administration and Economics

Faculty of Science

Faculty of Computer Science, Electrical Engineering and Mathematics

Faculty of Arts and Humanities

Faculty of Mechanical Engineering

Department of Electrical Engineering and Information Technology

Department of Computer Science

Institute of Mathematics

broad research area, but no international studies

some facts now

more details by Prof. Scheideler
Department of Electrical Engineering and Information Technology

Facts

- 1,000 Students
  - 650 Bachelor
  - 350 Master
  - 60 PhD

- 120 Academic staff

- 15 Full Professors & research groups

- Over 30% international students and staff
Department of Electrical Engineering and Information Technology
Research Topics

Information technology, Optoelectronics & Photonics

Automation and control

Electrical energy technology
Department of Electrical Engineering and Information Technology
International Master Programs

Electrical Systems Engineering

Computer Engineering

Optoelectronics and Photonics
Studying at a University in Germany…

- Research-oriented (Humboldt philosophy)
  - Many interesting topics actually investigated by the professors and their research groups
  - Hands-on projects in real research labs
  - Relies on self-motivation – not a school, we just loosely guide you, it is up to you to study and research on your own

- Types of courses:
  - Lectures, exercises, tutorials (might need pre- and post preparations)
  - Seminars: critically evaluate research materials you receive and use your analytical skills to prepare talk (no simple repetition of information materials)
  - Group project – others will depend on your pace of work and your output
  - Master thesis – you work mainly independent on your own project
More information and counseling

**Electrical Systems Engineering:**
Study Advisor: Prof. Bärbel Mertsching, ms-ese@upb.de
https://ei.uni-paderborn.de/studium/studienangebot/electrical-systems-engineering/

**Computer Engineering:**
Study Advisor: Prof. Sybille Hellebrand, sybille.Hellebrand@uni-paderborn.de
http://www.eim.upb.de/ce/en

**Optoelectronics & Photonics:**
Study Advisor: Prof. Stefan Schumacher and Prof. Jens Förstner, info@photonics.upb.de
http://photonics.upb.de

**General Student Advisory Service (Electrical Engineering Department):**
https://ei.uni-paderborn.de/en/studies/beratung-und-unterstuetzung/student-advisory-service/
studienberatung@ei.upb.de
Pursuing a PhD at Paderborn University

Many of our best students pursue a PhD after their master study

- focus is on independent research in one of our many world-class research groups
- diverse topics and cooperative projects
- paid employments or stipends are usual (sometimes with teaching/tutoring obligations)
- PhD typically takes 3-5 years
My personal advice

• Find fellow students for a study group to learn with, discuss courses!
• Really get involved in the courses, small classes allow actual interaction with the teachers!
• If you have prerequisites, clear them early!
• If you need a job, first look for research or teaching assistant positions in the faculty!
• If you plan to work at a German company afterwards, learn German!
• Try to find a healthy balance between studying and other activities!
• If you encounter problems, don't hesitate to talk to study advisors, professors, or the diverse advisory services!

I wish you all a great and successful time studying at Paderborn University!!!