



PROF. DR. CHRISTOPH SCHEYTT

**DEPARTMENT OF ELECTRICAL ENGINEERING
AND INFORMATION TECHNOLOGY**

WELCOME OF INTERNATIONAL STUDENTS

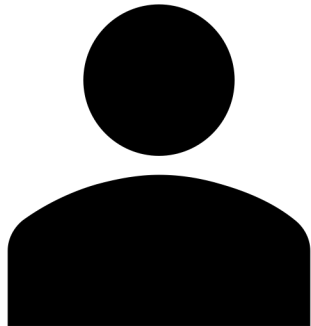
SUMMER SEMESTER 2023



Prof. Dr. Christoph Scheytt

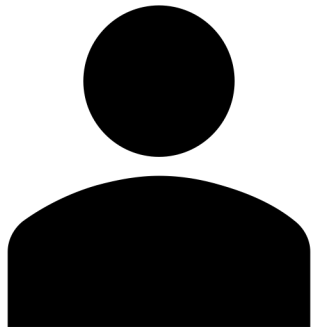
- *Head of the System and Circuit Technology group*
- *Research focus: Micro/Nanoelectronics, Integrated Circuit (IC) Design, Nanophotonics, Photonic IC design*
- *Teaching: Circuit and System Design, Wireless IC Design, Wireline Communication IC design, seminar topics, projects, master projects*
- *Currently 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) !



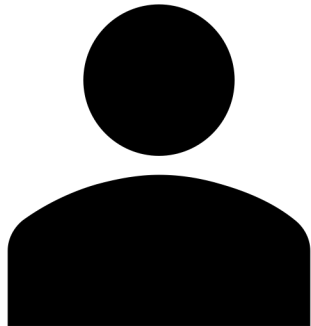
You? Where are you from?

- 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



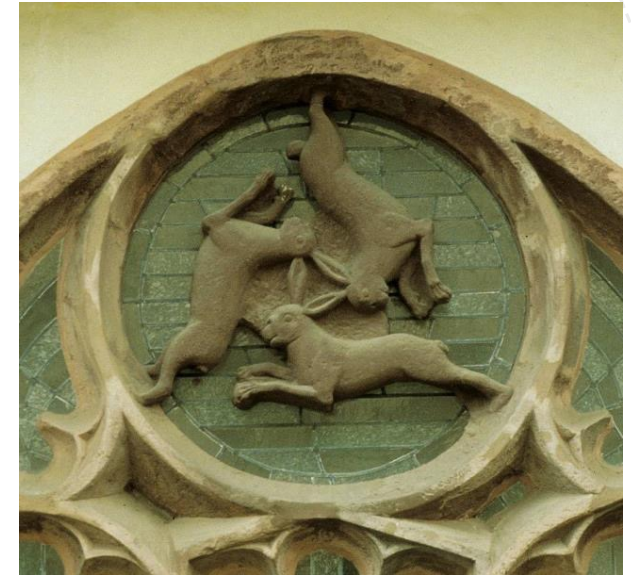
- Electrical Engineering @ UPB



- Our international master programs

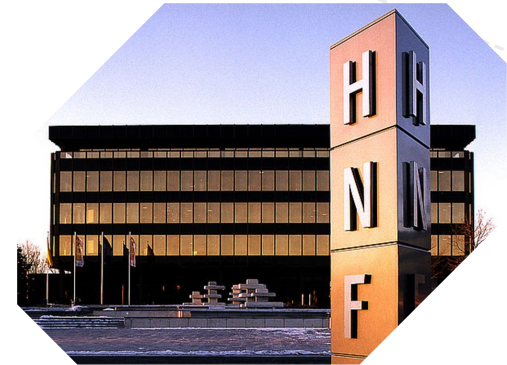


Paderborn - University Town with history



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"

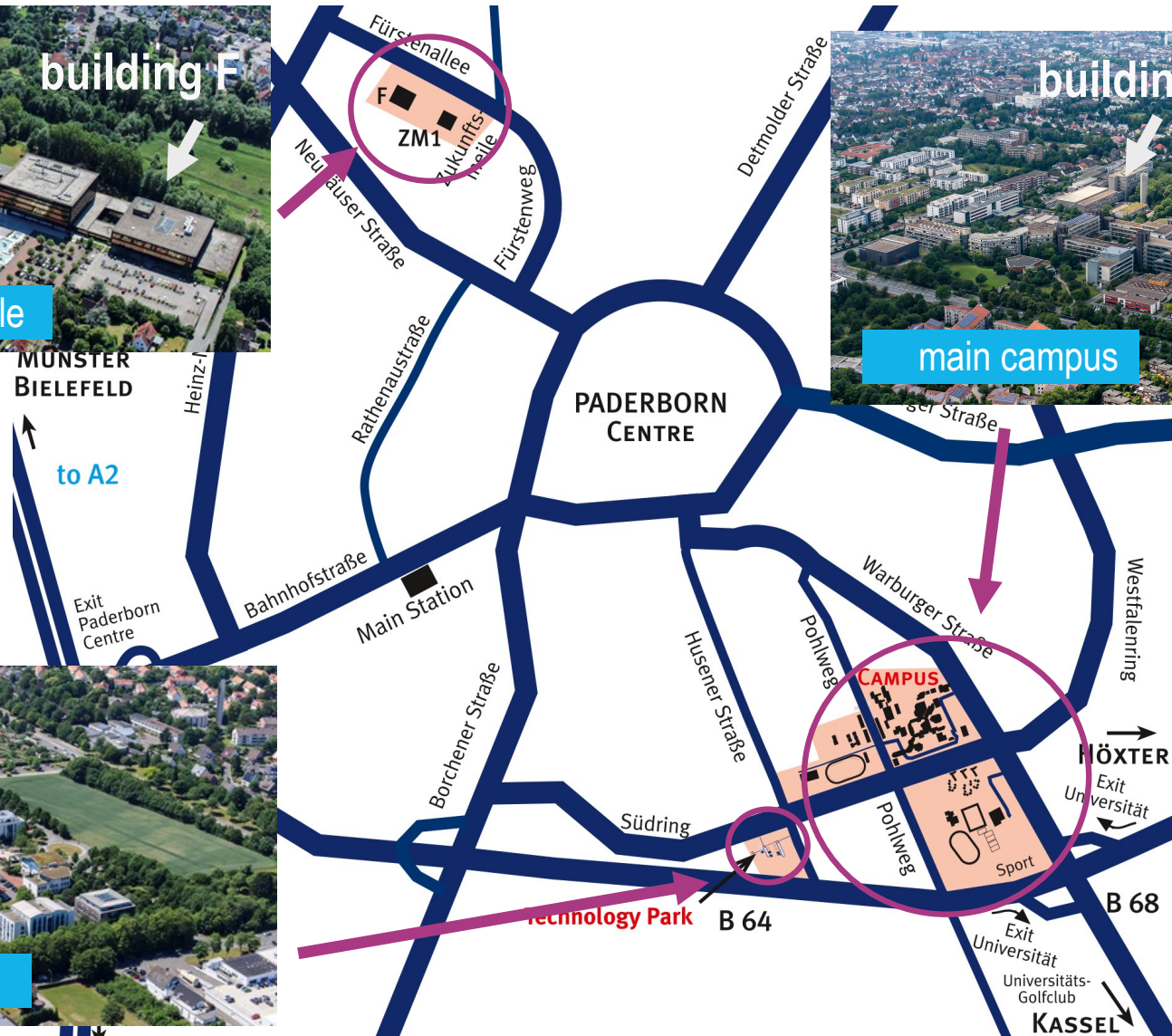
- 20,000 Students
- 2400 staff (50% academic)
- 250 Professors
- 800 PhD
- 50 Mio € External research funding per year



Paderborn University – Impressions (before the pandemic)



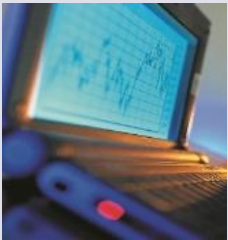
Paderborn University – 3 locations



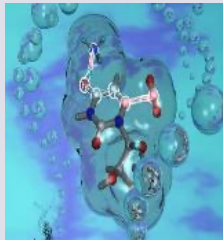
Paderborn University - Structure



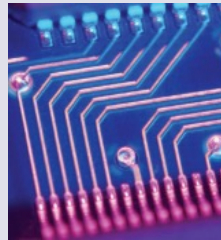
Faculty of Business
Administration and
Economics



Faculty of
Science



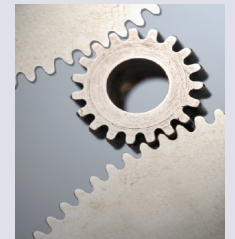
Faculty of Computer Science,
Electrical Engineering and
Mathematics



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

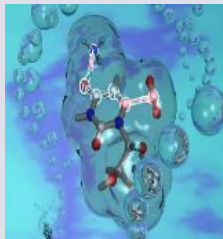
Joint Venures

- **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

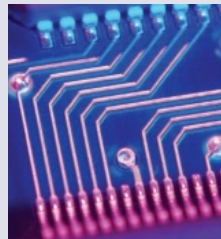
Faculty of Business
Administration and
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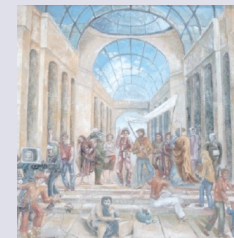
Faculty of
Science



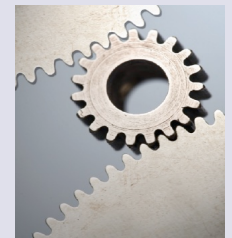
Faculty of Computer Science,
Electrical Engineering and
Mathematics



Faculty of Arts
and Humanities



Faculty of
Mechanical
Engineering



Department of Electrical
Engineering and Information
Technology

some facts now

Department of Computer
Science

more details by
Prof. Scheideler

Institute of
Mathematics

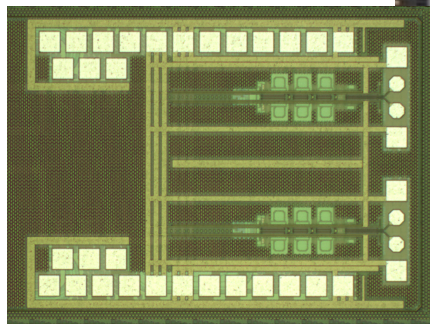
broad research area,
but no international studies

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Department of Electrical Engineering and Information Technology

Research Topics

Information technology,
Optoelectronics & Photonics



Automation and control



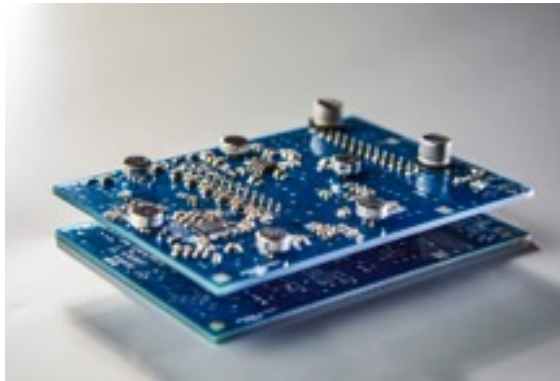
Electrical energy
technology



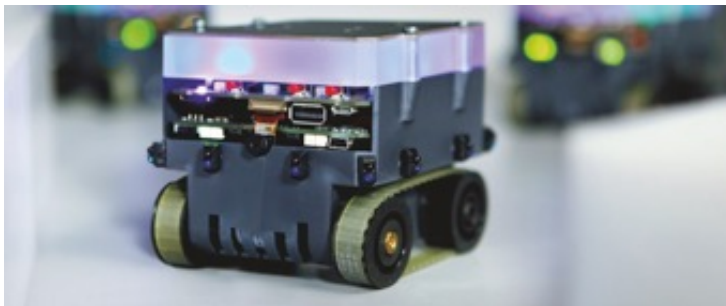
Department of Electrical Engineering and Information Technology

International Master Programs

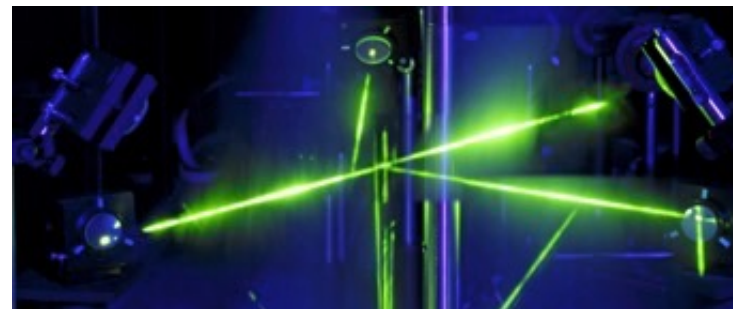
Electrical Systems Engineering



Computer Engineering

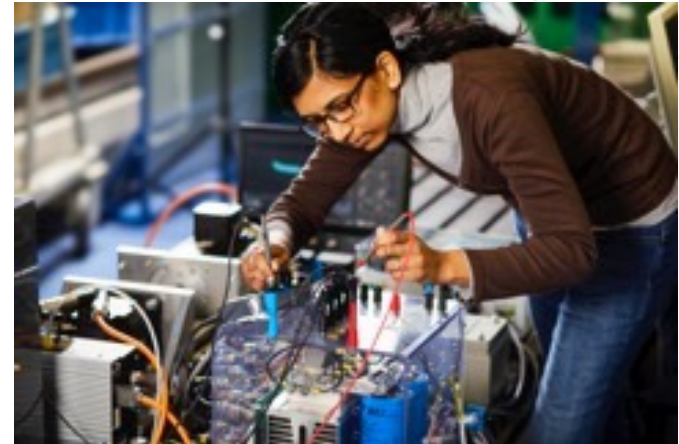


Optoelectronics and Photonics



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
- payed 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!!!