

# DISTRIBUTED OPERATING SYSTEMS

## *INTRODUCTION*

<https://tud.de/inf/os/studium/vorlesungen/dos>

**HORST SCHIRMEIER**

# Organisation

- Lecturers: Prof. Dr.-Ing. **Horst Schirmeier** (TUD), Dr.-Ing. **Carsten Weinhold** (BI)  
+ several more research-group members
- **Mandatory: register for mailing list** (see website)
  - must use TUD mail addresses
- Hybrid format (BBB, recordings, both “best effort”)
- Lecture: Monday, 11:10, APB/E008
- Exercise: Monday 13:00, APB/E009
  - roughly every 2 weeks, starting 2025-05-05

# Exam

- Oral exam, after the semester
  - Don't miss the exam registration deadline with the examination office!
  - Contact [os@mailbox.tu-dresden.de](mailto:os@mailbox.tu-dresden.de) for an exam appointment **early**
    - Matriculation number; Module name (e.g., INF-BAS4); "DOS w/ Dr. Weinhold" (or: Prof. Schirmeier); date wishes + constraints (e.g., "between X and Y")
    - for INF-BAS4 / INF-VERT4: list other lectures + examiners
  - Expect delays due to second-examiner sync. (*Komplexprüfung*), vacation period, etc.
  - Language: German or English (or mixture)
- Topics: lecture AND exercise contents

# “Distributed Operating Systems” (DOS)

- **Course name** not really fitting anymore:
  - rather: “Interesting/advanced Topics in Operating Systems”
  - ... will be renamed to „Advanced Operating Systems” (AOS) next year
- **Advanced OS topics:**
  - OS architectures, modern file systems, real-time systems, cloud computing / virtualization, mobile OSs, synchronization, trusted computing
- **Low-level, HW/SW interface topics:**
  - Memory consistency models, novel memory technologies, high-performance I/O, side channels
- Some overlap with “Distributed Systems” (Dr. Springer / Prof. Wählisch) and some classes by Prof. Fetzer

# Literature

- [1] A. Silberschatz, P. B. Galvin, G. Gagne. *Operating System Concepts*. Wiley, 2018.
- [2] A. Tanenbaum, H. Bos. *Modern Operating Systems*. Pearson, 2015.

