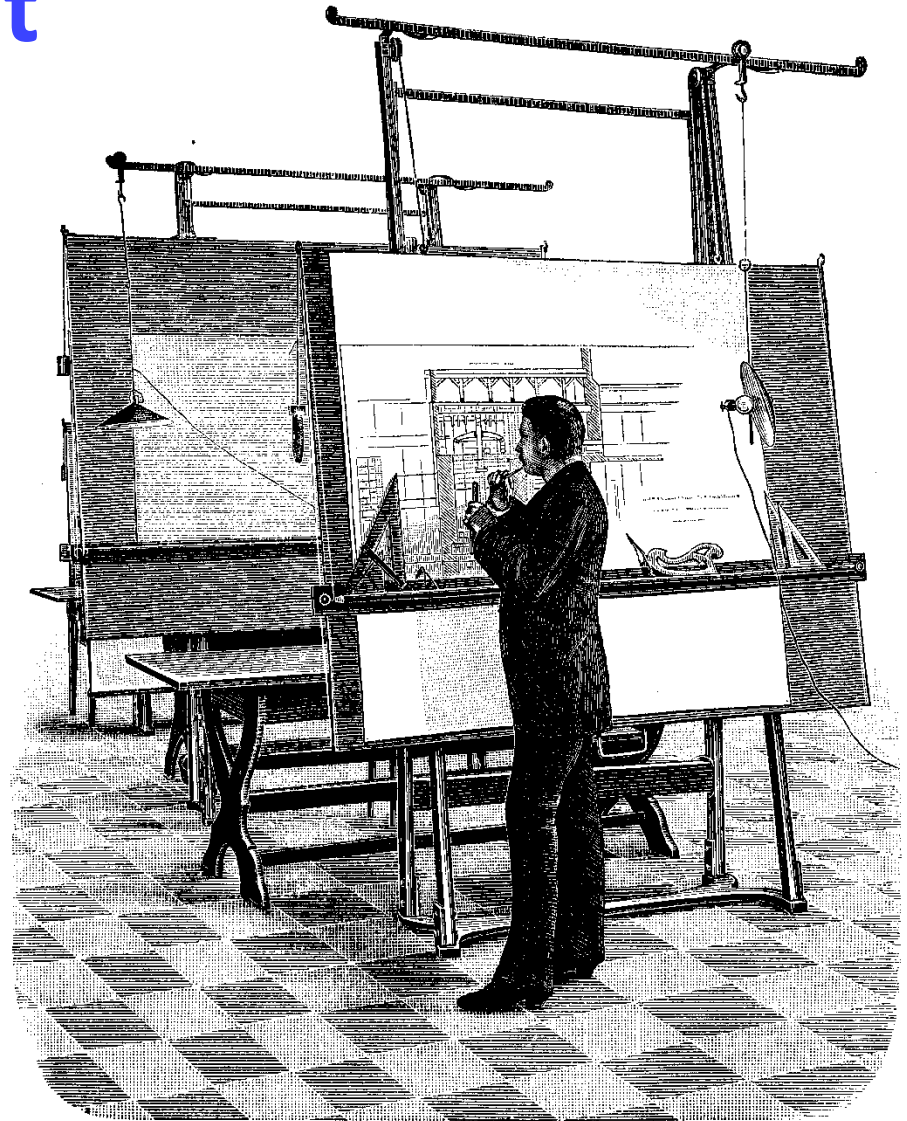# Data Management for Engineering Applications

Winter Semester
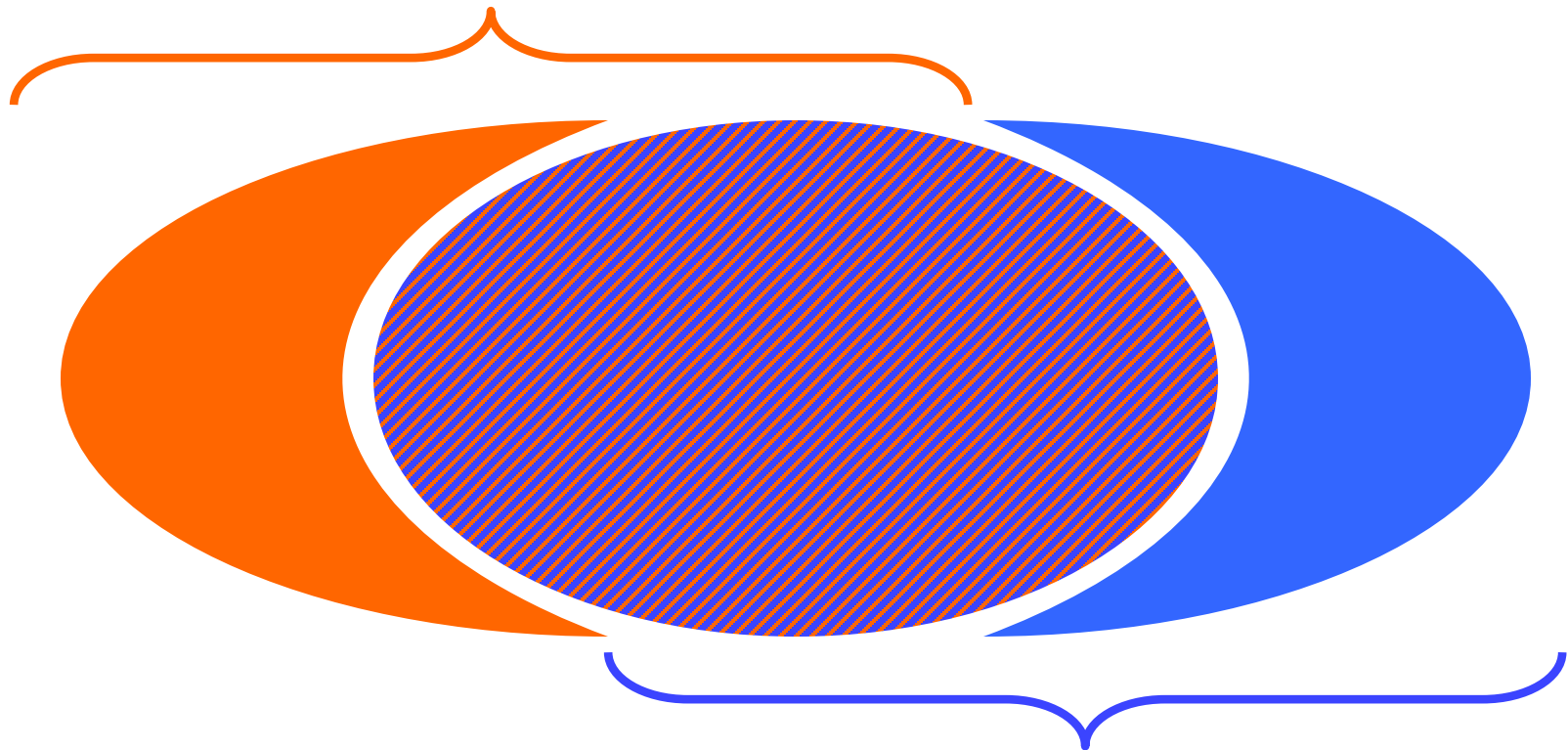2019/2020

Dr. Eike Schallehn

Why is Eike Schallehn doing this lecture? ;-)

- Studied in Magdeburg
  - 1994: during an internship developed system for management of technical drawings (back then still stored on paper!!)
  - 1996: diploma thesis on the applicability of object-oriented systems for engineering applications
- 1996 – 1999 in a object-oriented database company
  - Many customers used this database for engineering applications (1 CAD system by Siemens, several Engineering Data Management Systems)
- Since 1999 back at the OvGU
  - Involved in several projects
  - Teaching: introduction lecture "Computer Science for Engineers", several small lecture on advanced concepts of data management

Field of the Lecture

Engineering applications with specific requirements

Database features for non-standard applications

Content Overview

- ## Product Data
  - Geometrical Data and CAD
  - Complex Product Structures
  - Non-geometrical Data, Simulation, FEM, etc.

- ## Product Data Management
  - Versions, Variants, Configurations
  - Product Data and Engineering Documents

- ## Product Life Cycle Management
  - Engineering Processes
  - Collaborative work
  - Integration and Interoperabilty

Further Readings

- Lecture and slides are supposed to be self-contained
- References to literature for additional reading will be made available within separate chapters where appropriate

Organizational Overview

- Lecture
  - Once a week
    - Lecture
    - Questions
- Excercise
  - Once a week, two alternative time slots
    - Exercise sheets (online)
    - Questions and discussions
  - First exercises in first week of November
- Exams
  - Written exam after the end of the lecture period
  - Registration for exams in January

Schallehn: Data Management for Engineering Applications

Questions?