Data Management for Engineering Applications

Winter Semester
2018/2019

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 Interoperability
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

- **Exercise**
  - 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
Questions?