Formal Concept Analysis
Welcome and Organizational Issues

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Organization

### Lectures and Exercises

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Monday, 14:50 – 16:20, room APB E005</th>
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</thead>
<tbody>
<tr>
<td>Hands-on Exercise</td>
<td>Monday, 9:20 – 10:50, room APB E005</td>
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</tbody>
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### Course Web Page

https://goo.gl/BZ40gt

### Contact

Sebastian Rudolph  sebastian.rudolph@tu-dresden.de, room 2035, scheduled individually ...or at the Open House
Organization

*hands-on exercise* means

- *autonomous work* on the practice sheet in small teams of 3-4 students, under supervision
- *no general repetition* of lecture material
- *no demonstration* of the sample solution (will be provided later)

*necessary* for that is

- making notes during the lecture
- performing autonomous follow-up course work *before* the exercise
- bringing material and your notes to the exercise
- developing own activity
Why this exercise concept?

- active development of the lecture material is more effective
- discovering relationships in the material
- learning structured thinking and autonomous working
- learning team work
- learning to explain things
- exercise for the exams ;-) 
- You have finished your study of . . . Your personal strengths include pro-activity and team work, you are communicative and willing to cooperate. (typical job advertisement)
Agenda

1. Organization

2. Overview
Overview

Organization

I  Contexts, Concepts, and Concept Lattices
   1  Concept Lattices
   2  Multi-valued Contexts and Conceptual Scales

II  Closure Systems and Implications
   3  Closure Systems
   4  Implications

III Knowledge Discovery
   5  Attribute Exploration
   6  Rule Exploration
   7  Attribute Exploration with Background Knowledge

IV  Extensions of FCA
   8  Triadic Formal Concept Analysis