

Part I

Organizational Matters

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- ▶ Modul: IN2011
 - ▶ Name: "Parallel Algorithms"
"Parallele Algorithmen"
 - ▶ ECTS: 8 Credit points
 - ▶ Lectures:
 - ▶ 4 SWS
 - Mon 14:00–16:00 (Room 00.08.038)
 - Fri 8:30–10:00 (Room 00.08.038)
 - ▶ Webpage: <http://www14.in.tum.de/lehre/2014WS/pa/>

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▶ **Required knowledge:**

- ▶ IN0001, IN0003
“**Introduction to Informatics 1/2**”
“Einführung in die Informatik 1/2”
- ▶ IN0007
“**Fundamentals of Algorithms and Data Structures**”
“Grundlagen: Algorithmen und Datenstrukturen” (GAD)
- ▶ IN0011
“**Basic Theoretic Informatics**”
“Einführung in die Theoretische Informatik” (THEO)
- ▶ IN0015
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The Lecturer

- ▶ Harald Räche
- ▶ Email: raecke@in.tum.de
- ▶ Room: 03.09.044
- ▶ Office hours: (per appointment)

- ▶ Tutors:
 - ▶ Chris Pinkau
 - ▶ pinkau@in.tum.de
 - ▶ Room: 03.09.037
 - ▶ Office hours: Tue 13:00–14:00
- ▶ Room: 03.11.018
- ▶ Time: Tue 14:00–16:00

Assignment sheets

- ▶ In order to pass the module you need to pass a 3 hour exam

▶ Assignment Sheets:

- ▶ An assignment sheet is usually made available on Monday on the module webpage.
- ▶ Solutions have to be handed in in the following week before the lecture on Monday.
- ▶ You can hand in your solutions by putting them in the right folder in front of room 03.09.019A.
- ▶ Solutions will be discussed in the subsequent tutorial on Tuesday.

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- ▶ PRAM algorithms
 - ▶ Parallel Models
 - ▶ PRAM Model
 - ▶ Basic PRAM Algorithms
 - ▶ Sorting
 - ▶ Lower Bounds
- ▶ Networks of Workstations
 - ▶ Offline Permutation Routing on the Mesh
 - ▶ Oblivious Routing in the Butterfly
 - ▶ Greedy Routing
 - ▶ Sorting on the Mesh
 - ▶ ASCEND/DESCEND Programs
 - ▶ Embeddings between Networks

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2 Literatur



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