# Seminar Summer Term 2014 **Dynamics of Knowledge and Belief**

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### Organization



#### Website:

http://www.kbsg.rwth-aachen.de/teaching/SS2014/SemDKB

#### Seminar Dates:

- Introductory Meeting: Wednesday, March 18th 2014
- Talks: One to three days of talks, first week of August

#### Location:

All meetings take place in Seminar Room 15 (6202)

#### Seminar Paper



Given literature is a **starting point for own literature search**. You need to read a number of references to complete the picture!

- Seminar paper and talk should be in English!
- Prepare the paper and the slides preferably with LATEX
- About 20 pages (including references)
- Your paper will need multiple iterations

## Review of a Seminar Paper



The review should help your fellow student to improve his seminar paper and prove that you read it thoroughly!

- Summary of the seminar paper (e.g., 3 sentences)
- Things you liked about it (e.g., 1 paragraph)
- Major comments (e.g., what's hard to understand?)
- Minor comment (e.g., typos)

Talk



## Slides to **condense and support transfer of your knowledge**. Be brief and precise so your listeners can follow!

- Talk must be in English
- Presentation should be  $\sim$ 35 min + 10 min discussion
- Prepare the slides preferably with LATEX
- Contact your adviser in case of questions

## Rescission Policy



Up to three weeks from now on you are allowed to recede from the seminar without any consequences. A later rescission will be graded as a failed attempt!

## Library Tour/Training

- specialized training on literature search:
   small groups (up to 6), individual examples,
   local and supra-regional catalogs and databases
- Presentation: distinguishing different types of literature
- acquisition of literature: delivery service, full text search, lending and interlending, etc. pp.
- guided tour: the CS-Library and what it has to offer
- rally: practical exercise
- length: 2 h

Participation mandatory if not already completed!

## Dynamics of Knowledge and Belief



#### Formal accounts for:

- What do I know (initially)?
- Closed World Assumption: if I don't know something, it's false
- How to learn new things (sensing)?
- How to revise beliefs?
- How to plan with beliefs?

Logic will be very important!

## **Topics**



- Knowledge and Action
- 2 Progression
- 3 Classic Belief Revision
- 4 Belief Revision under Action
- 5 Proper Knowledge Bases
- 6 Noisy Sensors
- Modal Situation Calculus
- 8 Planning and Sensing
- 9 Limited Belief
- Continual Planning
- Conformant Planning

#### Procedure



- We use a conference system:
  - https://www.easychair.org/conferences/?conf=semdkb2014 Deadlines are strict!
- Five stages:
  - 1 Understand literature, discuss it with your advisor 2-4 weeks
  - 2 Write and submit the seminar paper 8-10 weeks
  - 3 Read and review fellow students' seminar papers
    2 weeks
  - 4 Prepare final seminar paper and slides 2 weeks
  - 5 Give talk, listen to others early in August

#### Schedule

2014-03-18: Introductory meeting 2014-03-18: Get an EasyChair account  $^1$  today 2014-03-31 - 2014-04-18: Discuss literature with advisor 2-4 weeks 2014-06-20: Paper submission deadline  $^2$  8-10 weeks 2014-07-04: Review deadline  $^3$  2 weeks 2014-08-01: Paper camera-ready version  $^4$  2 weeks 2014-08-04 - 2014-08-08: Seminar talks 1-3 days

To keep the deadlines: submit early and often!

https://www.easychair.org/conferences/?conf=semdkb2014

<sup>&</sup>lt;sup>2</sup>By this date you *must* have submitted

<sup>&</sup>lt;sup>3</sup>By this date you *must* have written and submitted your reviews

<sup>&</sup>lt;sup>4</sup>By this date you *must* have submitted your final seminar paper