

Sarah Gaggl

Faculty of Computer Science, Institute of Artificial Intelligence, Computational Logic Group

Seminar Introduction

Lecture 1, 13th April 2026 // Seminar Logic-Based Knowledge Representation, Summer Term 2026

Organisation

Learning Outcomes

- The students will get an **overview of recent research** topics within the field of **Explanations for Logic Programs**
- The students will be able to **write a scientific article** and **give a scientific presentation**
- The students will participate in a **peer-reviewing process**

Organisation

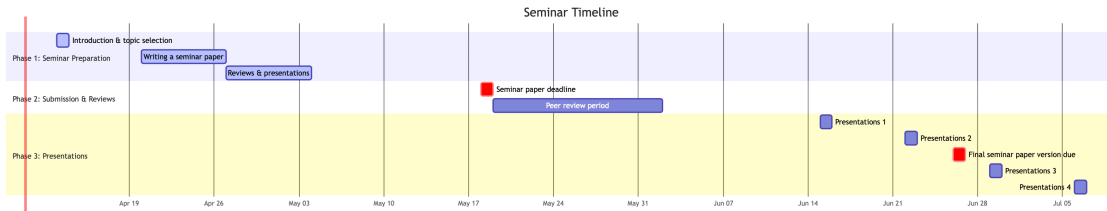
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Organisation:

- Today: article selection
- Students will read related literature and write a **seminar paper** of 4-5 pages (excluding references)
- Each student will **review 3 seminar papers** from colleagues
- **Final version** of seminar paper will be graded
- Each student will give a **20 min talk** (+10 min discussion) about his/her article
- Opal (paper upload, peer-reviewing process, final versions upload)
- **Grading: 2/3 seminar paper, 1/3 presentation**

Timeline



1. Seminar Sessions

- Apr 13 – Introduction & topic selection
- Apr 20 – Writing a seminar paper
- Apr 27 – Reviews & presentations

2. Seminar Paper Process

- May 18 – Seminar paper deadline
- May 19 – Jun 1 – Peer review period
- Jun 26 – Final seminar paper version due

3. Presentation Dates

- Jun 15 – Presentations 1
- Jun 22 – Presentations 2
- Jun 29 – Presentations 3
- Jul 6 – Presentations 4

Topics

1. Contrastive Explanations for Answer-Set Programs
2. Explaining Answer-Set Programs with Abstract Constraint Atoms
3. Why This and Not That? A Logic-Based Framework for Contrastive Explanations
4. Strong Inconsistency in Nonmonotonic Reasoning
5. Answer Set Explanations via Preferred Unit-Provable Unsatisfiable Subsets
6. Advancements in xASP, an XAI System for Answer Set Programming
7. Model Reconciliation in Logic Programs
8. Witnesses for Answer Sets of Basic Logic Programs

Outlook

Next session

- How to read a research paper
- How to write a seminar paper
- Requirements
- Use of AI