Course Organisation:

What do you have to do, before 8th/9th April to join the course:

- Read about the requirements before you join the course!
 If you did not join the course Grundlagen von Datenbanken at University of Paderborn, there is a lot of work needed as prerequisite, before you have the knowledge to join the course. Take enough time to prepare for the prerequisites before you join the first lecture, i.e. before 8th/9th April.
- 2. Please deregister as soon as possible, if you cannot meet the requirements in time, i.e. before 8th/9th April, such that there is space for other students to join the course.
- 3. First lecture is given twice:

Due to the high number of registrations, the first lecture is given twice, Mon 8.4.2019 9-12 in F1.110 and Tue 9.4.2019 11-14 in F1.110. As both timeslots will contain exactly the same stuff, come to only one of these two timeslots, i.e. if you can come on Mon 8.4.2019 9-12, do this, otherwise come Tue 9.4.2019 11-14.

4. It is required that you install SWI-Prolog **8.0.2-1** on your computer before you start the exercises, i.e. before April 9th 2019.

Reserve the date: Wed 10th April 9-11 in F1.110, and bring your laptop with you.

This is an extra time slot for getting started with the exercises. Ideally, you do not need this time slot as you have done the first exercises on your own before that date. This time slot will be used only to explain, how to get started with the exercise, i.e. do exercises 1.1. to 1.4. It is the definitely last option to get some installation help.

Course topic

The course focusses on the programming language Prolog. Prolog has been popular in the 1980s for research projects, but Prolog did not have a significant commercial acceptance because it is hard to write efficient programs in this language. Since the beginning of the 2000s, the language has not been used a lot any more, but one commercial use-case of Prolog exists (IBM Watson). The language nearly died, but a few implementations have survived.

Although Prolog is not used in commercial programming, it may be worth while studying the language because it opens a view to programming that is different from the view of procedural languages and different from the view of functional languages.

Within this course, we will take this Prolog point of view to describe solution ideas to

Within this course, we will take this Prolog point of view to describe solution ideas to different subtopics of AI.

Note that we will not present complete solutions to real problems, but rather provide solution sketches, due to time constraints and due to the limitations of the Prolog language. However, the lecture is centered around running example programs provided in Prolog. Throughout the lecture, we use SWI-Prolog, a Prolog extension that is available as public domain software package for Windows and MacOS.