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# PROBABILISTIC AND DIFFERENTIABLE PROGRAMMING

V0: ORGANIZATION

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# What this course is about

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## Differentiable Programming and Probabilistic Programming for Machine Learning<sup>1)</sup>

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1) Yes, this is a footnote on a slide, believe it or not. The three lines summarizing the topic of the course is the optimal outcome w.r.t my subjective measure - using a non-gradient optimization procedure starting from the original course name: Probabilistic Differential Programming -> Probabilistic and Differential Programming -> Probabilistic and Differentiable Programming -> Differentiable and Probabilistic Programming



# Course

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- Aktuelle Themen Data Science und KI: Probabilistic Differential Programming (CS5070/CS5071)
- Lecture with seminaristic parts
- All relevant information also given in Moodle website of this course <https://moodle.uni-luebeck.de/course/view.php?id=8367#section-0>

# Lecture

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- **Slides and recordings**
  - in Moodle asynchronously (mainly from previous semester)
- **Specifica**
  - Time: Wednesdays 16:00-17:30
  - Start: 19.10 Lecture V0 (this one on organization)  
26.10 Lecture V1 (Intro, Motivation, Overview)
  - Room: Seminarraum Informatik 4, Minsky
  - Modus
    - Short recap of contents of slides/recording
    - Further Examples
    - Inverted classroom: You ask and I ask
  - Content: Differentiable programming (and deep learning), probabilistic modelling and programming -> V1

# Seminar

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- Part of lecture
- Time: Wednesday 16:00-17:30
- You have to actively participate in asking questions and answering questions on lecture contents

# Oral exam

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- End of the semester
  - Date to be specified yet
- Prerequisite: Successful participation in inverted class room
- About 30 minutes on all topics of lecture
- But at the beginning of the exam I will ask you what your favourite topic is