

Course organization

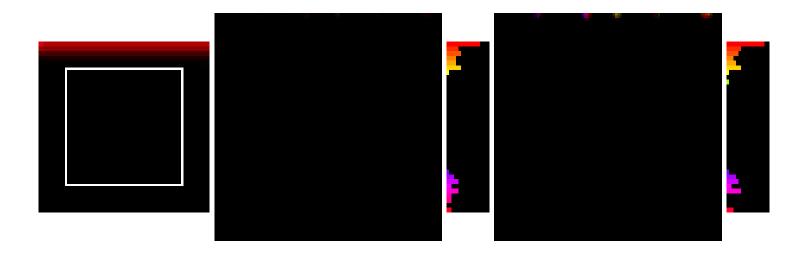
- Lectures outline in next slide
- Lab-work 3 sessions
- Paper presentations
- This semester will be focused more on cortical processing
- Participation in one experiment (details TBA)
- We will cover most of the most important topics, but there will be bias towards Vision

Outline - Prednasky

- 27.2. Sub-cortical vision, color, binocularity
- 6.3. Medium-to-high level vision
- 13.3. Computational modelling: system identification
- 20.3. Computational modelling: dynamical modelling
- 27.3. Development and learning
- 3.4. Buffer (test)
- 10.4. Motorika I
- 17.4. Hippocampus I
- 24.4. Hippocampus II
- 15.5. Learning
- 22.5. Cognitive theories of multimedia learning
- + 3 session with Kamil Vlcek on *methodology of neurobiology; memory;* spatial cognition

Lab work

 Developmental models of primary visual cortex in Topographica (3 sessions)



• Paper presentations (1-2 sessions, can be in exam period)

Conditions for passing the course

- Active participation in class and lab-work
- Participation in psychophysics experiment
- Written test 2 neuro-anatomy chapters from the Bear book
 - Chapter Chapter 7, plus pages 205-248, minus cranial nerves, blood supply, brain stem nuclei
 - Oral test 2 chapters of choice from Bear book, from chapters 8+
- 15 minute presentation of a paper review