Multivariate Pattern Analysis
Course Nov 16 / 17
at NIMH

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Schedule for the Course Day 1

09:00-10:30: Organization / Intro to MVPA
Coffee break 10:30-11:00
11:00-11:15: Overview over The Decoding Toolbox
11:15-12:45: Machine learning basics
Lunch break: 12:45-02:00
02:00-02:45: Creating Matlab decoding script from scratch
02:45-03:15: Levels of analysis (wholebrain vs. ROI vs. searchlight)
Coffee break 3:15-3:30
03:30-04:00: TDT tutorial walkthrough
04:00-05:00: Coding based on examples / free coding
Schedule for the Course Day 2

09:00-09:30: Coding of searchlight analysis from scratch
09:30-10:30: Experimental Design / Preprocessing of MVPA
Coffee break 10:30-11:00
10:30-11:00: Manual set up of decoding design
11:00-12:30: Statistical Analysis of MVPA
Lunch break
01:45-02:45: Representational Similarity Analysis (RSA)
02:45-03:15: Coding of RSA
Coffee break 03:15-03:30
03:30-04:00: Open Q&A session
04:00-04:40: Talk by Fernando Ramirez on neural basis of RSA
Organizational issues (1)

• Theoretical sessions will be followed by study questions that are answered in small groups and discussed together
• Please form small groups of 3-6 for answering these questions
• Practical sessions will require laptops with TDT and Matlab
• Theoretical sessions do not require laptops
Organizational issues (2)

• The course is (only) two days and within a lecture can move from very easy to more challenging very fast
• For that reason I strongly recommend not using the laptop during lectures for other things or you may lose track
• There is ample time for that during the breaks / practical sessions

• Please interrupt if something is unclear
• Please wait with more complex or general questions until the topic has been finished or until the session is over