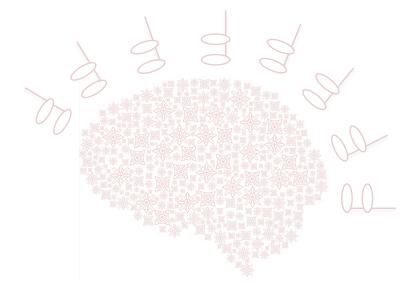


# Donders Toolkit of Cognitive Neuroscience

Advanced MEG/EEG toolkit





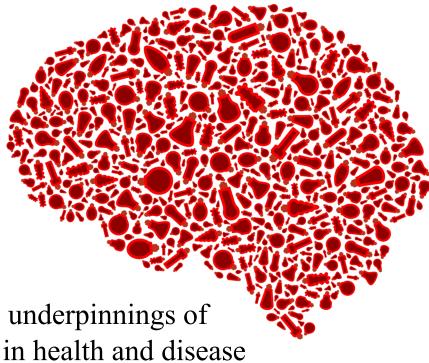


Donders Institute, DCCN and Research Infrastructure



**Donders Institute** 

## Mission



Understanding the mechanistic underpinnings of human cognition and behavior in health and disease

#### **Donders Institute**



## Organization

Research institute (or "network") that is part of the Radboud University Nijmegen

~1000 researchers, ~100 principal investigator groups

#### Four centres

Donders Centre for Cognitive Neuroimaging (this)

Donders Centre for Cognition (social science faculty)

Donders Centre for Neuroscience (science faculty)

Donders Community for Medical Neuroscience

### Affiliated institutes/centers (on-campus)

Max Planck Institute for Psycholinguistics

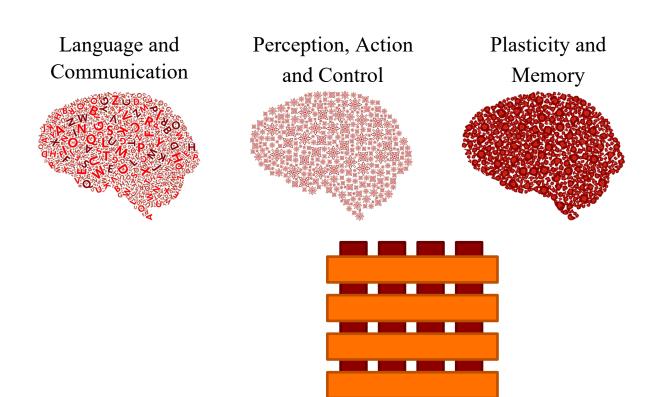
Behavioural Science Institute

Center for Language Studies

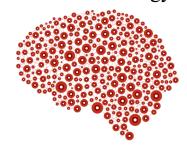
### **Donders Institute**

## d

## Focus on Research Themes



Natural computing and Neurotechnology



## d

### Research facilities at the DCCN

MRI labs

3x 3T in Nijmegen, including EEG

7T in Essen, Germany

14T to come

MEG lab

CTF 275 channel system

FieldLine 32 sensor OPM system

EEG labs

baby lab, up to 64 channels adult lab, up to 128 channels

Brain stimulation

FUS

TMS, including EEG

tACS/tDCS

Behavioural labs

9 cubicles

3 larger labs

High-performance compute cluster

2500 cores

25 TB RAM

1 PB disk storage

### Research facilities at the DCCN

All infrastructure is shared among PI groups and with the other Centres

Centre-wide ethical approval for "standard" studies with healthy adults

Internal review of research projects in the Project Proposal Meeting (PPM)



## Research projects at the DCCN

### Project Proposal Meeting

- (1) Title slide: plus all researchers and institutions involved, including the responsible PI
- (2) Background: 1 slide
- (3) Experimental Question: 1 slide
- (4) Design/Materials/Procedure/Subjects: max 2 slides
- (5) Data analysis: 1 slide
- (6) How outcomes are informative for the central issue: 1 slide

Following presentation at PPM and approval, lab time and disk quota is allocated and the researcher can start.

Pilotting is possible prior to that



## Research facilities at the DCCN



