

Below, you find the course schedule, including lectures and lecturers. We are very happy about the fantastic lineup of speakers that have agreed to contribute to this course. Course organizers are marked with an *.

*! Before the firsts lecture, please prepare by reading **Chapter 1** in the main course book “[Introduction to Human Neuroimaging](#)” by Hans Op de Beeck and Chie Nakatani.*

| Modality | Date | Time | Lecture topic/focus | Lecturer |
|-----------------|-------------|-------------|--------------------------------------|--------------------|
| sMRI | Aug 30th | 830-1000 | Introduction to sMRI & sMRI module | *Daniel Ferreira |
| sMRI | | 1030-1200 | Instrument | Farshad Falahati |
| sMRI | Sept 1st | 830-1000 | Data 1 | Ludovica Griffanti |
| sMRI | | 1030-1200 | Data 2 | Rosaleena Mohanty |
| sMRI | Sept 6th | 830-1000 | Applications - academic (neurology) | Daniel Ferreira |
| sMRI | | 1030-1200 | Applications - clinical (psychiatry) | Ahmed Abdulkadir |
| sMRI | Sept 8th | 830-1000 | Future directions 1 | Rodrigo Moreno |
| sMRI | | 1030-1200 | Future directions 2 | Martin Reuter |
| sMRI | Sept 9th | 830-1200 | Exam | *Daniel Ferreira |

*To prepare for this module, please read **Chapters 2 and 3** in the [main course book](#).*

| Modality | Date | Time | Lecture topic/focus | Lecturer |
|-----------------|-------------|-------------|---|--------------------|
| fMRI | Sept 13th | 830-1000 | Introduction to fMRI & fMRI module | *Rita Almeida |
| fMRI | | 1030-1200 | Basis of BOLD signal | Jonathan Berrebi |
| fMRI | Sept 15th | 830-1000 | Data analysis: localization and decoding | Rita Almeida |
| fMRI | | 1030-1200 | Data analysis: resting-state connectivity | Peter Fransson |
| fMRI | Sept 20th | 830-1000 | Applications – academic research | Janina Seubert |
| fMRI | | 1030-1200 | Applications – clinical research (psychiatry) | Predrag Petrovic |
| fMRI | Sept 22nd | 830-1000 | Applications – aging research | Grégoria Kalpouzos |
| fMRI | | 1030-1200 | Future directions | Patrik Andersson |
| fMRI | Sept 23th | 830-1200 | Exam | *Rita Almeida |

To prepare for this module, please read **Chapters 5-8** in the [main course book](#).

| Modality | Date | Time | Lecture topic/focus | Lecturer |
|-----------------|-------------|-------------|--|---------------------|
| MEG/EEG | Sept 27th | 830-1000 | Introduction to MEEG & MEEG module | *Christoph Pfeiffer |
| MEG/EEG | | 1030-1200 | Biophysical origin & instrumentation | Mikkel Vinding |
| MEG/EEG | Sept 29th | 830-1000 | Data - basics | Robert Oostenveld |
| MEG/EEG | | 1030-1200 | Data - continued | Mia Liljeström |
| MEG/EEG | Oct 4th | 830-1000 | Overview: "Surprises, struggles, and joys on the bumpy MEG road" | Riitta Hari |
| MEG/EEG | | 1400-1530 | Academic applications | Sylvain Baillet |
| MEG/EEG | Oct 6th | 830-1000 | Clinical applications | Hanna Renvall |
| MEG/EEG | | 1030-1200 | Future directions | Matti Hämäläinen |
| MEG/EEG | Oct 7th | 830-1200 | Exam | *Christoph Pfeiffer |

To prepare for this module, please read **Chapters 9-12** in the [main course book](#).

| Modality | Date | Time | Lecture topic/focus | Lecturer |
|-----------------|-------------|-------------|--|-----------------------|
| PET | Oct 11th | 830-1000 | Introduction to PET & PET module | *Anton Forsberg Morén |
| PET | | 1030-1200 | "PET": Source and sensors | Martin Bolin |
| PET | Oct 13th | 830-1000 | "The radioligand – basics": Properties and development | Sangram Nag |
| PET | | 1030-1200 | Data - basics | *Anton Forsberg Morén |
| PET | Oct 18th | 830-1000 | Applications - history | Lars Farde |
| PET | | 1030-1200 | Clinical applications | Ruben Smith |
| PET | Oct 20th | 830-1000 | Commercial applications | Magnus Schou |
| PET | | 1030-1200 | Academic applications | Simon Cervenka |
| PET | Oct 21st | 830-1200 | Exam | *Anton Forsberg Morén |

To prepare for this module, please read [Hooker, JM "Human Positron Emission Tomography Neuroimaging"](#).

| Modality | Date | Time | Lecture topic/focus | Lecturer |
|-------------------|-------------|-------------|---|---------------------|
| Multimodal | Oct 25th | 830-1000 | Introduction to multimodal imaging & MMI module | Daniel Lundqvist |
| Multimodal | | 1030-1200 | History / future directions MEG/EEG/TMS/MRI | Risto Ilmoniemi |
| Multimodal | Oct 27th | 830-1000 | Applications of multimodal imaging PET/MRI | Lars Stiernman |
| Multimodal | | 1030-1200 | Multimodal analysis/RSA | Linda Henriksson |
| Multimodal | Oct 28th | 830-1200 | Exam | *Christoph Pfeiffer |

To prepare for this module, please read **Chapters 13-14** in the [main course book](#).

Study project

25th of October: submit a 1 sentence description of the proposed topic of the project to one of the course organizers, preferably the one responsible for the module most related to the project. This is the latest day to do this. Please do it as soon as possible so you have time to adjust the topic if needed.

1st of November: submit the project report.

3th and 4th of November: submit the 3 power-point slides, present the projects, discuss with other students.