



## Lecture Series "Neuroimaging Physics and Signal Processing: Basic MR Acquisition & Data Analysis" (Basic Course)

(4<sup>th</sup> &) 5-7 October 2021

	04 Oct 2021	05 Oct 2021	06 Oct 2021	07 Oct 2021
09.00-10.30		MR imaging and physics basics (Brammerloh, Eichner, Kirilina, Schmidt)	Structural MRI (Brammerloh, Kirilina)	Advanced MRI techniques (Chaimow, Eichner, Schmidt)
10.30 12.00	Math Update I (Mueller, Scherf)	Functional MRI (Chaimow, Lorenz, Kirilina)	Diffusion MRI (Eichner)	Imaging Study Design (Lipp, Lorenz)
12.00-13.00				
13.00-14.30	Math Update II (Mueller, Scherf)	Good enough practices in scientific computing (Lipp, Lorenz, Mueller, Scherf)	Spatial processing and VBM (Mueller)	Implementing own data analysis tools (Mueller)
14.30-16.00		Overview tools and methods for MRI data analysis (Chaimow, Lipp, Lorenz, Mueller, Scherf)	Analysis of fMRI (Lorenz, Mueller)	Analysis of high-field MRI data / layer-based analysis (Brammerloh, Kirilina)

### Organiser

International Max Planck Research School on Neuroscience of Communication: Function, Structure, and Plasticity (IMPRS NeuroCom)

### Venue

Different training rooms at Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig.

### Target group

PhD students

### Contact

Imprs-neurocom@cbs.mpg.de \* <http://imprs-neurocom.mpg.de>

### ECTS CPs

Participants have the opportunity to receive 2 ECTS CPs.

*Requirements:* Regular participation (80%) and an individual assignment (details specified at the beginning of the course).



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