

























## DeepMI

# FastSurfer / FreeSurfer

### course

September 17-19, 2025 DZNE | Bonn | Germany

Scan for more information:



A hands-on, introductory course on state-of-the-art methods for fast and reliable neuroimage analysis



DeepMI Lab @ German Center for Neurodegenerative Diseases (DZNE)





### **Course topics**

#### Segmentation



- Deep-learning-based segmentation of anatomical brain images
- From images to metrics: extracting and quantifying anatomical features

#### **Surfaces**



- Surface models and surface-based morphometry
- Surface registration and the preparation of statistical analyses

### Longitudinal analysis



- Unbiased within-subject registration and person-specific templates
- Advanced statistical analysis using linear mixed-effect models

## Group analysis



- The general linear model in neuroimaging analyses
- Statistical inference: hypotheses, contrasts, tests, significance

#### QC and edits

- Quality control of images, segmentations, and outputs
- Edits, troubleshooting, and practical issues

### FastSurfer ecosystem



- Specialized applications and add-on modules
- Outlook to ongoing and planned developments

#### Course schedule

Wednesday, September 17		Thursday, September 18		Friday, September 19	
13:30 - 13:45	Welcome	09:15 - 10:45	Analyzing individual cases 2: surfaces	09:15 - 11:15	Group analysis: statistical modeling and inference
13:45 - 14:30	FastSurfer / FreeSurfer overview: Introduction to structural neuroimaging	11:15 - 12:30	Analyzing individual cases 2: exercises	11:30 - 12:30	Group analysis: exercises
14:45 - 15:45	Analyzing individual cases 1: segmentations	13:30 - 15:00	Longitudinal processing and analysis	13:30 - 14:15	The FastSurfer ecosystem
16:00 - 17:30	Analyzing individual cases 1: exercises	15:30 - 17:00	Quality control and edits	14:15 - 15:00	Wrap-Up and Farewell

### All lectures come with demonstrations and practical exercises

Registration is open until August 31 or until all spots are filled. The course fee is EUR 250.

### Register here:





