

Biomedical imaging techniques in neuroscience: basic principles and current results

Jena, 01.05.2021

Lecture period: weekly on Friday (with exceptions) 20th of May till 16th of July 2021, 02:00-03:30 PM

Location: Zoom Meeting, <https://uni-jena-de.zoom.us/j/65594970358> (PC: 641996)

- 20.05.2021
(Thursday!!) **Hao Chen**
The Hongkong University of Science and Technology, Department of Computer Science and Engineering
VoxResNet: Deep voxelwise residual networks for brain segmentation from 3D MR images
<https://www.cse.ust.hk/admin/people/faculty/profile/jhc>
- 28.05.2021 **Maxime Chamberland**
Donders Institute for Brain, Cognition and Behavior, Radboud University, Nijmegen, The Netherlands
Tract-specific MRI measures explain learning and recall differences in multiple sclerosis.
<https://www.ru.nl/english/people/chamberland-m/>
- 04.06.2021 **Federica Agosta**
Universita Vita-Salute San Raffaele, Milano, Italy
Classification of Alzheimer's disease and mild cognitive impairment using a single MRI and deep neural networks
<https://www.univr.it/en/docenti/a/agosta-federica>
- 11.06.2021 **N/A**
- 18.06.2021 **Francesco Sanvito**
Neuroradiology Unit and CERMAC, IRCCS San Raffaele Scientific Institute, Milan, Italy
Along-tract statistics of neurite orientation dispersion and density imaging diffusion metrics to enhance MR tractography quantitative analysis in healthy controls and in patients with brain tumors
<https://orcid.org/0000-0003-3379-9958>
- 25.06.2021 **Nick Pawlowski**
Biomedical Image Analysis Group, Department of Computing, Imperial College London, UK
Deep structural causal models for tractable counterfactual inference
<https://scholar.google.com/citations?user=a5u9fVYAAAAJ>
- 02.07.2021 **Antonia Barghoorn**
University Medical Center Freiburg, Department of Radiology, Medical Physics
MR-encephalography (MReg) – Technical Aspects
<https://www.uniklinik-freiburg.de/mr-en/members/current/barghoorn.html>
- 09.07.2021 **N/A**
- 16.07.2021 **Yi-Hang Tung**
Otto von Guericke Universität Magdeburg, Institut für Physik, Biomedizinische Magnetresonanz
Distortion correction of diffusion imaging by using PSF mapping and view angle tilting at 7T
https://www.bmmr.ovgu.de/Team/Yi_Hang+Tung-p-466.html

