



# Treatment of visual and visuospatial deficits after brain damage

CvO University of Oldenburg, 14.7.23/15.7.23 University Library Hall, Uhlhornsweg 49-55

Attendance is free of costs, but registration is mandatory for organizational reasons. Please, register here: https://uol.de/neuromodulation/events/workshop-neglect-july-2023/registration

### Scientific program

*Friday* Opening of the meeting by Christiane Thiel (speaker of the GK "Neuromodulation") (13.00-13.10)

Session 1: Introductory clinical case presentations (13.10 – 14.15) Helmut Hildebrandt (Bremen/Oldenburg)

> Balint's syndrome Representation left side of the body in neglect patients A case with reaching impairments: what is the cause?

Session 2: Attentional models and interventions in visuospatial neglect (14.30 – 16.30) (Moderator Christiane Thiel, Oldenburg)		
Brigitte Kaufmann (Luzern):	Video-Oculography During Free Visual Exploration – a sensitive method to detect neglect	
Nadine Schenke (Oldenburg/Bremen): Testing the Sprague effect with unilateral eye patching in LH and RH patients after small and large strokes		
Simone Vossel (Jülich):	Deficits in probabilistic inference in patients with neglect and potential implications for rehabilitation	
Andreas Sprenger (Lübeck):	Gaze-contingent modification can help to reduce ipsilesional attention bias	
Christoph Herrmann (Oldenbur	g): taCS and the modulation of visuospatial attention in healthy subjects.	
Riccardo Galli (Genf):	fMRI-based Neurofeedback Modulation of Visual Attention: Implication for Hemi-spatial Neglect Syndrome Rehabilitation	

## Session 3: Neuromodulation as treatment option for visuospatial neglect (17.00 – 18.40) (Moderator Christoph Herrmann, Oldenburg)

Marij Middag-van Spanje (Maa	estricht): Transcranial alternating current stimulation in chronic neglect patients: effective as add-on to functional treatment?
Thomas Nyffeler (Luzern):	Theta Burst Stimulation in patients with neglect
Monika Harvey (Glasgow):	Is neuromodulation (tDCS) a feasible tool for enhancing action training for the rehabilitation of chronic spatial neglect?
Bernhard Elsner (Jena):	Transcranial direct and alternating stimulation for the treatment of neglect: results from a meta-analytic approach
Hans-Otto Karnath (Tübingen):	Magnetic Vestibular Stimulation as treatment option for patients with neglect.

#### Saturday

## Session 4: Treatment options for patients with neglect and lateropulsion (8.45 -10.15) (Moderator Andreas Sprenger, Lübeck)

Lisa Kunkel gnt. Bode (Lübeck)	: Combined optokinetic stimulation and cueing-assisted reading therapy
Helmut Hildebrandt (Bremen):	Recalibration, not realignment improves visuospatial attention in patients with neglect. Results from an RCT using prism adaptation
Nadine Külzow (Beelitz-Heilstä	tten): Effects of end-effector-controlled gait training on walking ability in non-ambulatory patients with left-sided neglect
Anna E. Pape (Bremen):	Is Prism adaptation an option to treat the Pusher syndrome?
Soraya Brosset (Genf):	EEG-based Neurofeedback Modulation of Visual Attention: Implication for Hemi-spatial Neglect Syndrome Rehabilitation

## Session 5: Virtual and augmented reality, a new horizon for the treatment of neglect (10.45- 12.15) (Moderator Andrea Hildebrandt, Oldenburg)

Julia Belger (Leipzig):	Application of immersive Virtual Reality for the assessment and cognitive rehabilitation of visuospatial neglect
Eileen Bousché (Utrecht):	HEMIRehApp: Engaging Multisensory Immersive Rehabilitation App for patients with hemispatial neglect
Hanne Huygelier (Leuven):	Assessment and rehabilitation of neglect with a VR serious game (HEMIRehApp)
Dario Cazzoli (Luzern):	Eye-hand coordination in neglect: preliminary data from a project with augmented reality
Britta Stammler (Tübingen):	Active exploration training in spatial neglect with the new augmented reality app "Negami" – a randomized controlled trial
Nergiz Turgut (Quito):	A new tool for treating neglect by audiospatial stimulation