

# Curriculum Vitae Markus Junghöfer

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**Date/Place of Birth:** 22.01.1966; Münster (Westphalia)

**Family Status:** married; three children (age: 10, 15, 18 years)

## **Education:**

Graduation	Secondary School	1985	Freiherr-vom-Stein Gymnasium Münster Mean grade: 1.6
Diploma	Geophysics	1991	University of Münster Department of Geophysics Mean grade: 1.7
Degree dissertation	Physics	1991-93	Siemens AG Erlangen Department of Medical Engineering Grade: 1.0
Diploma	Physics	1994	University of Münster Department of Physics Mean grade: 1.6
Ph.D. Dr. rer. nat.	Cognitive Neuroscience	1999	University of Konstanz Department of Clinical Psychology Grade: Summa cum laude
Junior-Professor	General Psychology	2004	University of Konstanz Department of General Psychology
Privatdozent	IBB	2010	Münster University Hospital Institute for Biomagnetism and Biosignalanalysis
Professor (apl.)	IBB	2012	Münster University Hospital Institute for Biomagnetism and Biosignalanalysis

**Civil Service:** 1985-87 (20 months) Medical outpatient service; Caritas Society

## Academic and Research Experience:

### Research:

Jul 2018-Jan 2019	Visiting Scholar	University of Georgia, USA Department of Psychology Franklin College of Arts and Sciences
since 2005	Senior Research Scientist	Münster University Hospital Institute for Biomagnetism and Biosignalanalysis
2004	Junior-Professor	University of Konstanz Department of General Psychology
2003-2004	Assistant Professor	University of Konstanz Department of General Psychology
2000-2003	Post-Doctoral Research Associate	University of Konstanz Department of Clinical Psychology
1999-2000	Post-Doctoral Fellow	University of Florida National Institute for Mental Health (NIMH) Center for the Study of Emotion and Attention
1995-1999	Ph.D. Student	University of Konstanz Department of Clinical Psychology
1991-1993	Assistant Research Scientist	Siemens AG Erlangen Magnetoencephalography Research Group

### Teaching:

2018	Visiting Professor, Department of Psychology, University of Georgia, USA Clinical Neuroimaging of Emotions
since 2005	Lecturer, Otto-Creutzfeld-Center of Cognitive Neuroscience (OCC) Cognitive Neuroscience Methods
2004	Assistant Professor, Cognitive Psychology, University of Konstanz Anxiety and Anxiety-Disorders Psychophysiological Methods in affective Neuroscience
2003	Assistant Professor, Cognitive Psychology, University of Konstanz Neuropsychology of Memory Psychophysiology of Attention
2000-2003	Teaching Assistant, Clinical Psychology, University of Konstanz Psychophysiological Methods.
1999-2000	Visiting Lecturer, University of Florida and NIMH Center Data Processing and Methods of High Density EEG Introduction in Psychophysiological Methods
1995-1999	Teaching Assistant, Clinical Psychology, University of Konstanz Psychophysiological Methods

## Current Grant Support

- 07.2016 –2020 Hemodynamic (fMRI) and electrophysiological (MEG) brain responses during threat processing across anxiety disorders: Generalization, developmental aspects and effects of psychotherapy; DFG-Collaborative-Research-Center (CRC): Fear Anxiety, Anxiety Disorders. Third funding period. Project: SFB-TRR58-C07; PIs: Straube & Junghöfer (cooperation with Prof. Romer, Child and Adolescent Psychiatry).
- 01.2018-12.2019 Preventing return of fear through memory reconsolidation: An investigation of neurocognitive mechanisms using a novel Multi-CS-Conditioning Paradigm. DAAD German Academic Exchange Program. Cooperation with Tatia M.C. Lee, University of Hong Kong and Kati Keuper.
- 2015 –2018 Transcranial direct current stimulation of the medial prefrontal cortex for therapy of unipolar major depression. Interdisciplinary Center for Clinical Research; Medical faculty of the University of Münster; IZKF; Ju3/024/15; PIs: Junghöfer (coordinator), Arolt, Wolters

## Past Grant Support

- 2013 –2016 Anxiety driven imbalance of top-down and bottom-up processes during emotion perception and affective associative learning; DFG-CRC: Fear, Anxiety and Anxiety Disorders. Second funding period. Project: SFB-TRR58-C01; PIs: Junghöfer (coordinator), Zwanzger, Pantev
- 2011 – 2015 EU Marie Curie Actions – International fellowships: Emotional learning and extinction: integration of central and peripheral neural correlates. University of Münster University of Castellon (Spain) University of Florida (USA) PIs: Junghöfer (coordinator), Pastor
- 2011 – 2014 The role of conscious stimulus perception for the acquisition and elicitation of conditioned emotions and its implication for anxiety disorders; PIs: Bruchmann & Junghöfer; Foundation for Interdisciplinary Medical Research; University of Münster
- 2008 – 2012 Separation of rapid bottom-up and top-down processes during human fear acquisition and extinction and their modulation by anxiety risk factors; DFG-CRC: Fear, Anxiety, Anxiety Disorders. First funding period. Project: SFB-TRR58-C01; PIs: Junghöfer (coordinator), Zwanzger, Pantev
- 2012 Foundation for large medical appliance at the Medical Faculty of the University of Münster: 128 Channel Geodesic Electroencephalography System 300.
- 2010 – 2012 Social Stress Effects on Emotional Perception and Associative Learning; PIs: Schupp (50%) & Junghöfer (50%); DFG Transregio Forschergruppe (Konstanz-Zürich-Münster): The Science of Social Stress; Continuation
- 2008 – 2010 Extrastriate prefrontal stimulus evaluation in schizophrenia; PIs: Ohrmann & Junghöfer; Foundation for Interdisciplinary Medical Research (IMF); University of Münster  
1 doctoral student
- 2007 – 2010 Realistic head model based EEG/MEG beamformer in the spatiotemporal specification of sensory gating; PIs: Junghöfer (coordinator) & Wolters; DFG.
- 2008 Rapid neural correlates of affective face conditioning; PIs: Junghöfer & Moltó; University of Castellon (Spain).

2006 – 2008	Social Stress and affective information processing: A neuroscientific perspective; PIs: Schupp & Junghöfer; DFG Transregio Forschergruppe (Konstanz-Zürich-Münster) The Science of Social Stress.
2005 – 2008	Neural correlates of affective learning; PI Junghöfer; Part of Transregio (Konstanz – Tübingen-Mannheim) Neuronal Representation of Emotional Communication; Academy of Science Heidelberg. Continuation.
2002 – 2004	Neuronal representation of emotions in vision and audition – interactions and verbalization. PI: Junghöfer; Part of Transregio (Konstanz-Tübingen-Mannheim) Neuronal Representation of Emotional Communication; Academy of Science Heidelberg.
2002 – 2005	Neural correlates of emotion and attention; PI: Junghöfer; DFG.
1999 - 2001	Cortical Plasticity; Co-investigator; DFG.
1995 – 1999	Cortical Plasticity; Co-investigator DFG.

### Awards

Lienert Award for Methods in Biological Psychology of the University of Giessen, 1995  
 “Best dissertation of the Academic Year 1999” by the Foundation Science and Society of Konstanz University, 2000  
 Young Scientist Award of the German Society for Psychophysiological Research, 1999  
 Poster Award, Steinberg, ... & Junghöfer; Gesellschaft für Angstforschung, Berlin, 2010  
 Poster Award, Bröckelmann, ... & Junghöfer, NeuroVisionen, Bochum, 2012  
 Poster Award, Klinkenberg, ... & Junghöfer, Society for Psychophysiological Research, Florence, 2013  
 Best Poster Award; Rehbein & Junghöfer, European Society for Cognitive and Affective Neuroscience, Dortmund, 2014  
 Poster Award, Winker, ... & Junghöfer, Society for Psychophysiological Research, Vienna, 2017

### Editorial responsibilities

#### **Ad Hoc reviewer**

Biological Psychology; Cerebral Cortex; Emotion and Cognition; European Journal of Neuroscience;  
 IEEE Transactions on Medical Imaging; IEEE Transactions on Biomedical Engineering;  
 International Journal of Psychology; International Journal of Psychopsychology;  
 Journal of Cognitive Neuroscience; Journal of Clinical Neurophysiology; Language and Cognitive Processes;  
 Nature scientific reports; NeuroImage; Neuropsychologia; Progress in Brain Research; Psychophysiology

### Membership in Societies

Otto-Creutzfeldt-Center for Cognitive and Behavioural Neuroscience (OCC) at the University of Münster (Board Member)  
 Society for Psychophysiological Research (SPR)  
 German Society for Psychophysiological Research (DGPA)  
 German Society for Psychiatry Psychotherapy and Neurology (DGPPN)  
 Gesellschaft für Angstforschung (GAF)

## Research Interests

Psychophysiology of fear, anxiety and anxiety disorders  
Psychophysiology of attention and emotion  
Temporal dynamics of brain and behavior  
Signal processing of high density EEG and MEG data

## Publications

### **Diploma thesis in Physics (1995)**

Vergleich von MEG Ein- und Multidipolokalsierungen  
am Beispiel somatosensorisch evozierter Felder.

### **Dissertation in Psychology (1999)**

Räumlich hochauflösendes EEG. Prinzipien der Generierung Messtechnik und Signalanalyse.

### **Habilitation in Medicine (2010)**

Emotion and Attention: a neuroscientific perspective.  
Venia Legendi: „Cognitive and affective Neuroscience“.

## Positions on electoral lists for professorships

Salzburg, 2015; Position 3. W3 – Physiological psychology; Head of MEG facility  
Konstanz, 2015; Position 3. W3 – Clinical and/or neuropsychology; Head of MEG facility

## Software development

EMEGS (ElectroMagnetic EncaphaloGraphy Software written by Markus Junghöfer and Peter Peyk) is a freely available software package for high density EEG/MEG data analysis which includes among other features data preprocessing artefact correction averaging inverse modelling and statistical analysis. A large number of references document its use by several national and international EEG and MEG laboratories. See: [www.emegs.org](http://www.emegs.org)

Peyk P, De Cesarei A, & Junghöfer M; "ElectroMagnetoEncephaloGraphy Software (EMEGS): overview and integration with other EEG/MEG toolboxes" Computational Intelligence and Neuroscience Special issue: "Academic Software Applications for Electromagnetic Brain Mapping Using MEG and EEG"

Junghöfer M & Peyk P; ElectroMagentaEncephaloGraphy Software (EMEGS); Society for Psychophysiological Research software repository; [sprweb.org/repository](http://sprweb.org/repository)

Junghöfer M & Peyk P (2004) Analysis of electrical potentials and magnetic fields of the brain. *Matlab Select*; 2:24–8.

## Organization of Conferences, Workshops and Symposia

### Conferences

Thomas Straube & Markus Junghöfer  
International CRC symposium: Fear, Anxiety, Anxiety Disorders; Münster, 2015

Society for Psychophysiological Research (SPR) program committee member.  
Santa Fee 2004; Seattle 2015; Washington DC 2019

### Workshops

Johanna Kissler & Markus Junghöfer  
International workshop on 'Understanding Emotions: Insights into emotion communication and the brain'.  
Konstanz, 2004.  
Supported by the Center for Young Scientists Academy of Science Heidelberg and  
Center for Junior Research Fellows University of Konstanz

### Symposia

Maimu Rehbein & Markus Junghöfer  
ESCAN 2016 Porto  
Noninvasive brain stimulation induces transient changes in neural activity and behavior:  
Evidence across three stimulation methods

Ida Wessing & Markus Junghöfer  
SPR 2012 New Orleans  
Cognitive Emotion Regulation

Johanna Kissler & Markus Junghöfer  
ICON 2005 Symposium  
Perspectives on Affective Neuroscience.

Dean Sabatinelli & Markus Junghöfer  
SPR 2004 Santa Fee Symposium  
Emotional picture processing: converging hemodynamic and electrophysiological findings.

Andreas Keil & Markus Junghöfer  
TEAP 2004 Gießen Symposium  
Emotion und Aufmerksamkeit: zeitliche Aspekte

Johanna Kissler & Markus Junghöfer  
DGPA 2004 Freiburg Symposium  
Emotion in pictures sounds and language.