

Vienna



Middle European  
interdisciplinary  
master's programme in  
Cognitive Science

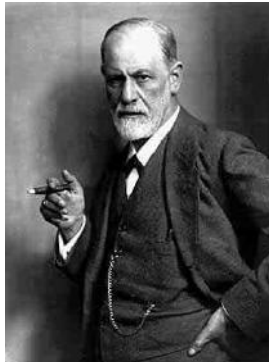


# Cognitive Science in Austria/Vienna

## History of “cognitive science” in Austria

Long tradition in psychology, behavioural biology, philosophy & neuroscience

K. Lorenz, S. Freud, E. Mach, K. Bühler, K. Popper, etc.



# Cognitive Science in Austria/Vienna

## 1995: Foundation of Austrian Society for Cognitive Science (ASoCS)

- Austria-wide platform for CogSci (interdisciplinary & inter-institutional)
- “uncover” the cognitive science activities spread & “hidden” all over the country (universities, extra-university research institutions)
- Making CogSci publicly visible
- Regular lectures (national & international speakers)
- 3 international New Trends in Cognitive Science Conferences
- Curriculum development

# Cognitive Science in Austria/Vienna

## More recent Developments

Since 2006 MEi:CogSci

Since 2010: Research Platform in Cognitive Science (<http://cognitivescience.univie.ac.at/>)

(CogSci Talks, PhD activities, lab visits, research projects, etc.)

PhD school Cognition & Communication (Cognitive Biology)

Vienna Doctoral School Cognition, Behaviour and Neuroscience

(<https://vds-cobene.univie.ac.at/>)

Interdisciplinary Cognitive Science PhD

**Mobility semester at Univie**

# New Trends in Cognitive Science

New Trends in Cognitive Science Seminar (6 ECTS)

WS 2017: The predictive coding approach to mind/cognition  
– Soheil Human, Tobias Schöberl

Journal Club (4 ECTS)

WS 2017: Causal inference in cognitive neuroscience  
(neuroimaging and stimulation) – Martin Tik

# Philosophy / Cognitive Science

Dept. for Philosophy

(<http://philosophie.univie.ac.at/>)

Markus F. Peschl, Matthew Ratcliffe, Line Ryberg Ingerslev, Alexander Batthyany, Hans Bernhard Schmid, Mark Coeckelbergh

Theory and methodology of cognitive science

The theory and practice of interdisciplinarity: cognitive science as a case study

Knowledge creation, Knowledge management, innovation, and Design Thinking

Cognitive science and education

Embodied cognitive science: grounding cognition in perception and action

Existential Cognition

Phenomenology and Cognitive Science

Social Cognition/Ontology

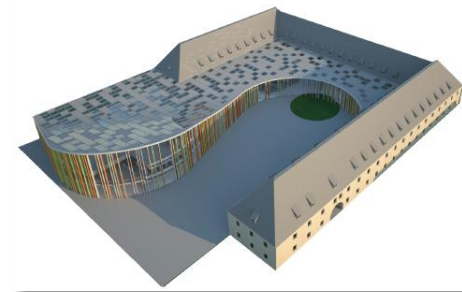
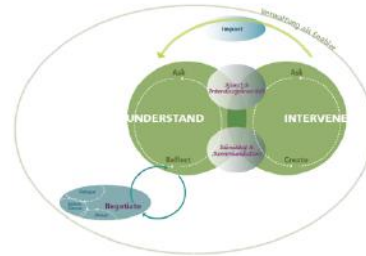
Philosophy of Technology



# Philosophy / Cognitive Science

## Project: “Innovation, knowledge creation, design thinking & enabling spaces”

Our guiding question concerns the topic of “how does the new come into the world?”. The focus of research is on developing and studying enabling environments/ ecosystems for processes of knowledge creation, (radical) innovation, and design (thinking)





# Linguistics

Dept. for Linguistics

( <http://www.linguistics.at/> )

Martin Prinzhorn, Chris Schaner-Wolles, Daniel Büring, Wolfgang  
Dressler, Susanne Reiterer

Neuro-, Psycho-, Patholinguistics

Language Acquisition – theories and mechanisms

2<sup>nd</sup> language acquisition

Connectionist modelling of language acquisition

Lexical and morphological acquisition

# Linguistics

Dept. for English and American Studies, Dept. of German Studies

(<http://anglistik.univie.ac.at/> , <http://germanistik.univie.ac.at/personen/eder-thomas/>)

Margarete Rubik, Nikolaus Ritt, Thomas Eder

Cognitive Poetics

Language and Cognition (historical and linguistic perspective)

Cultural aspects of language

Metaphors

# Behavioural/Cognitive Biology

Dept. of Cognitive Biology & Messerli Research  
Institute at Vetmed

(<http://cogbio.univie.ac.at/> & <http://www.vetmeduni.ac.at/de/messerli/forschung/forschung-kognition/>)

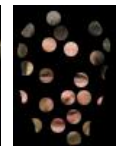
Thomas Bugnyar, Tecumseh Fitch, Ludwig Huber  
(Vetmed Uni)

Social cognition: theory of mind, empathy, imitation and social learning

Technical cognition

Evolution and development of cognition

Cognitive mechanisms of language, music and arts



# Behavioural/Cognitive Biology

## Associated Research Institutions:

KLI Konrad Lorenz Institute (<http://www.kli.ac.at/>)

KLF Grünau (<http://www.klf.ac.at/>)



# Psychology

## Faculty for Psychology

(<http://www.univie.ac.at/Psychologie>

<http://scan.psy.univie.ac.at/home/>)



Helmut Leder, Ulrich Ansorge, Claus Lamm, Giorgia Silani

Cognitive aesthetics

Design, aesthetics and innovation

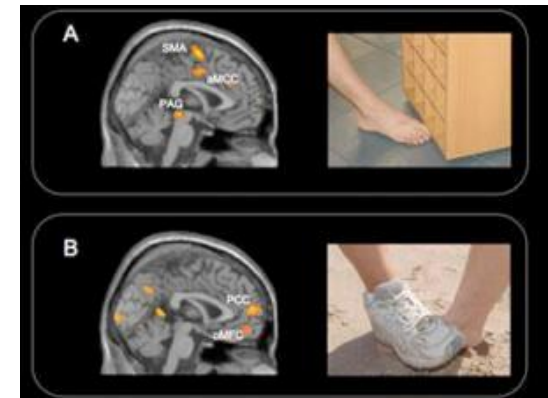
(Visual) Attention

Cognition & Emotion

Empathy

Social neuroscience

Neurobiology of social decision making



# Artificial Intelligence

Institute for Artificial Intelligence, MUW

Austrian Research Institute for Artificial Intelligence (OFAI)

(<http://www.ai.meduniwien.ac.at/>,

<http://www.ofai.at/>)

P. Petta, Robert Trappl, G. Dorffner, E. Buchberger

Models of Personality and Emotions

Natural Language Processing

Intelligent Data Analysis in Medicine

Cognitive Modelling

Knowledge-based Systems





# Neuroscience

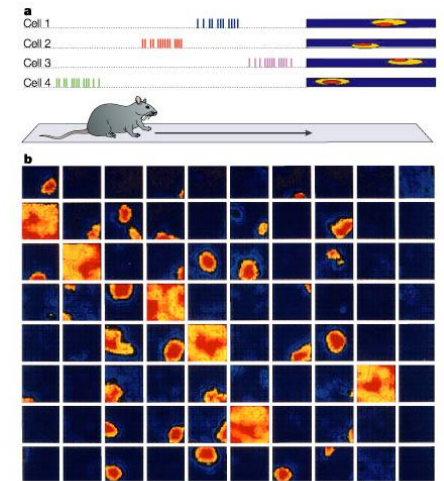
Center for Brain Research, MUW

(<http://www.meduniwien.ac.at/cbr/>)

Werner Sieghart, Thomas Klausberger, Michael Berger

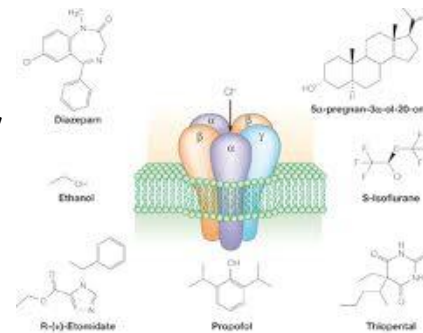
Signal Processing in Nervous Systems

Cognitive Neurobiology



Nature Reviews | Neuroscience

**Project: „Distribution of GABA $\alpha$  Receptor subunits in fear and anxiety“**



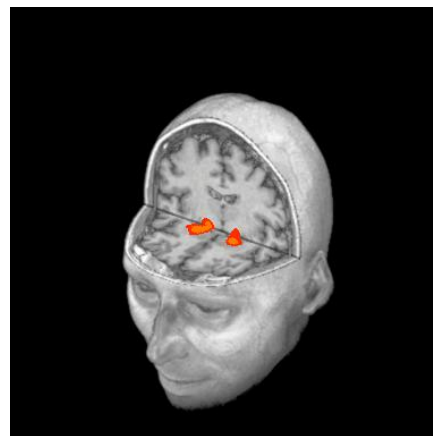
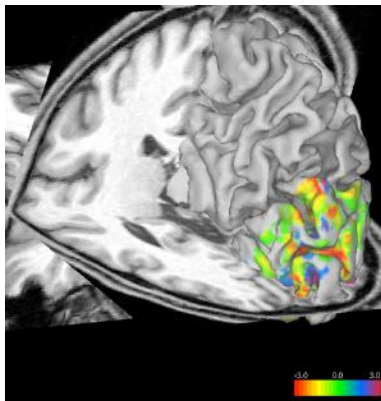
Nature Reviews | Neuroscience

# Neuroscience

MR Center of Excellence, MUW

(<http://www.meduniwien.ac.at/fmri/>)

Christian Windischberger



# Arts and Cognition

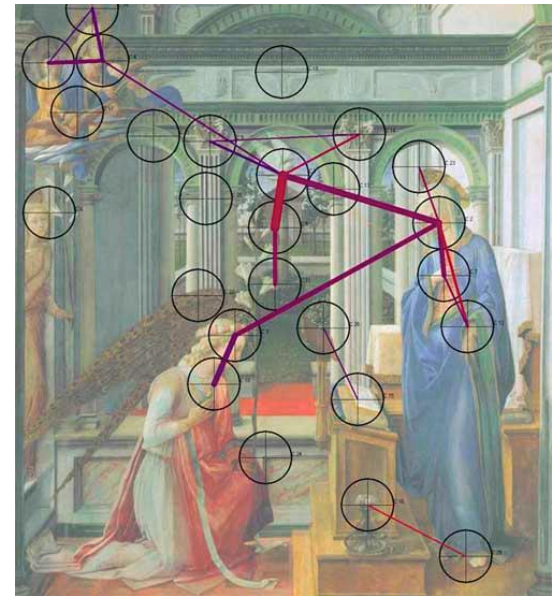
Department of Art History, Lab for Empirical Studies in Art History

(<http://kunstgeschichte.univie.ac.at/forschung/labor-fuer-empirische-bildwissenschaft/>)

Raphael Rosenberg

Perception and Cognition of Arts

Eye-tracking studies on artworks



# Cooperation: Danube University Krems

Research Center KnowComm, Department for Knowledge and Communication Management

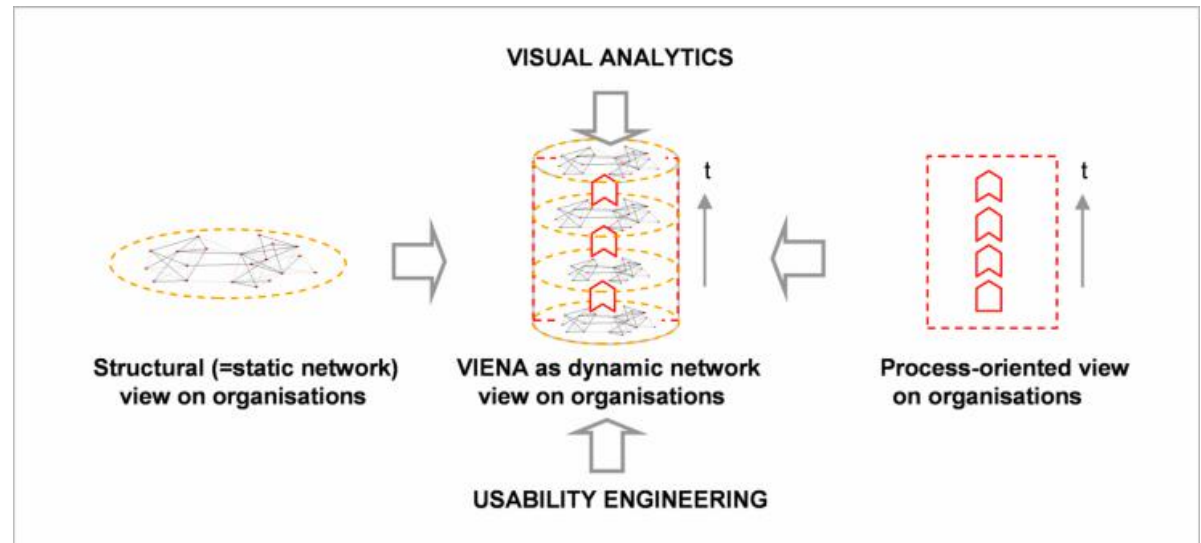
(<http://www.donau-uni.ac.at/knowcomm>)

Lukas Zenk, Florian Windhager

Information design

Usability

Network research



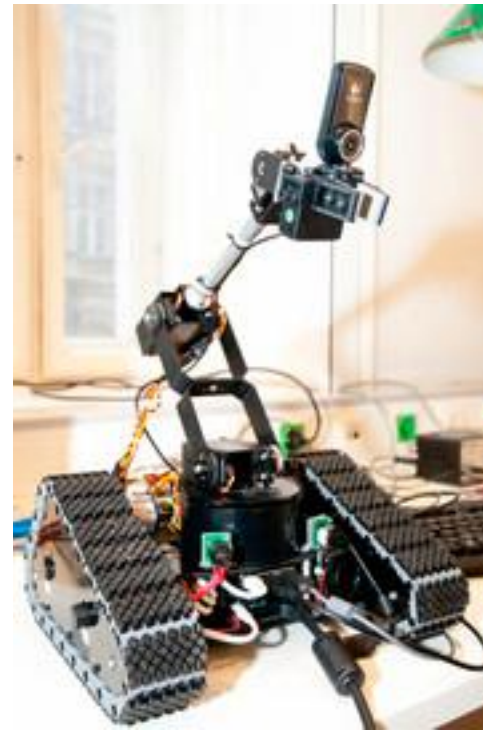
# Cooperation: Technical University Vienna

Automation and Control Institute (ACIN)

(<http://www.acin.tuwien.ac.at/> ,  
<http://www.acin.tuwien.ac.at/?id=248>)

Michael Zillich

Vision for Robotics



# Cooperation: Research Studios Austria

<http://sat.researchstudio.at/web-of-needs>

Soheil Human

User Experience Design, Semantic Web for the "Web of Needs"



# Cooperation: WU Wien (University of Economics)

<http://wu.ac.at/kbm>

Alexander Kaiser

Research Group Knowledge-Based Management

Knowledge Vision

Innovation

Learning from the future

Vocation



# Cooperation: Austrian Institute of Technology

<http://www.ait.ac.at/themen/biosignal-processing/>

Tilmann Kluge

Advanced Algorithms for Brain Signal Analysis

Automatical EEG Analysis of Epilepsy

