

WELCOME!

HOW DO YOU FEEL?
CALM GOOD
relaxed JUST need more COFFEE
excited INTERESTED INSPIRED
CURIOUS TIRED GREAT

Focus is the ROLE OF ACOUSTICS in human cognition

Auditory Cognition in Interactive Virtual Environments

Who attended the ICA 2019 in Aachen? who joined the Jam-session there? who is playing an instrument?

What do I wish for today? What excites me about my project?

hello hello

When I'm not working I enjoy doing...

A book I would recommend...

A person who inspires me...

We share the responsibility of the quality.

The invention of today

Psychology

Audictive

Virtual Reality

Research SUPPORT FACILITIES

LAB VISITS

early career SUPPORT

Promotion of Female researchers

STRATEGIES FOR Collaboration

networking across disciplines and locations

Virtual Kick-off-Meeting / April 27th 2022

annual meeting / winter school

- * including lectures on fundamentals from the different disciplines
- * Soft Skill Workshops

WORKSHOPS ORGANIZED BY AUDICTIVE FUNDED RESEARCHERS

AUDICTIVE CONFERENCE June 2023

WHAT IS IT ABOUT? WHY IS IT IMPORTANT? HOW DO WE PLAN TO CARRY IT OUT?

APlusE-MR-Audiovisual Plausibility and Experience in Multi-Party Mixed Reality

- Distributed multi-party mixed reality scenarios that involve groups of stakeholders and remote users
- Avatars maintain the illusion of plausibility
- Three research groups develop methods

Development and Validation of Audio-visual TR Technology on Basis of Experiments on Auditory Localization and Attention in Virtual and Real 3D Spaces

- Develops & validates a VR-based audio-visual test environment
- The validity of the generated virtual reality
- Theoretical findings known from real environments must be verified.
- Experimental scenario

Influence of visual cues in interactive audiovisual virtual environments on auditory attention decoding and cortical tracking of speech

- Understand how healthy people manage to filter out the voice of their current conversation partner
- Beyond just hearing but requires the ability to control attention adequately
- Find out how the test subjects control their attention

Audio-visual perception of vehicles while navigating in traffic: Design, evaluation and research application of multimodal virtual environment technologies

- Use of acoustic cues in judgments and compare
- Sense of hearing is important e.g. a pedestrian crossing a street
- Generates and auralizes vehicle pass-by

Evaluating cognitive performance in classroom scenarios using audiovisual virtual reality: EcoClass-VR

- Provides scientific and technical insights for virtual environments
- Improves the validity of cognitive performance research
- Cognitive performance assessment paradigms

Listening to, and remembering conversations between two talkers: Cognitive research using embodied conversational agents in audio-visual virtual environments

- Investigate the combined effects of performance-relevant but scarcely addressed audiovisual cues
- Influence of audio-visual characteristics on memory performance
- Develop an audiovisual Virtual Reality testing environments that includes embodied Virtual Agents.

Cognitive and signal-driven factors in dynamic perception

- gain a better understanding of auditory distance perception
- important part of spatial awareness
- Carry out psychoacoustic measurements
- identify related brain areas with MR

Influence of audio rendering in virtual environment on realism, presence, and socio-cognitive processing

- to assess the transfer of the acoustic perception from the original to the rendered scene
- the quality of the audio rendering is often neglected.
- Established recommendation and procedures for audio rendering in room-acoustics

Perceptual learning and neural plasticity in synthetic worlds. The case of distance perception

- simulated environment to provide a remapping of physical cues for the distance of sound sources
- with virtual realities becoming part of everyday life
- What extends our perceptual system?
- A series of psychoacoustic experiments will be conducted.

QoE-EVE-QoE Evaluation of Interactive Virtual Environment with Audiovisual Scenes

- Develop methodologies for QoE evaluation in Interactive Virtual Environments (IVEs).
- Brings new challenges to quality evaluation and render current evaluation approaches
- Builds upon the foundation of quality of experience research

an interdisciplinary project BETWEEN Three disciplines: COGNITIVE PSYCHOLOGY & VIRTUAL REALITY / COMPUTER SCIENCE

PRESENTATION OF Coordination Project

- Research Data management
- Collecting Data
- Connecting People

we get organized

- involves systemizing consolidating
- avoid redundancies in projects
- Collect Data continuously
- bring together research groups
- make them available to AUDICTIVE research community and beyond.
- the process of data collection
- Realization of the virtual environment
- methods to evaluate quality
- to track scientific progress

we make our work VISIBLE ONLINE

exercise

OUTLOOK

WWW.SPP2236-AUDICTIVE.DE

how to stay connected

UPCOMING MEETINGS AND WORKSHOPS

NICE discussions

chocolate!

new ideas

great organization

new perspectives

excellent organization

all your contributions