

Hanse-Wissenschaftskolleg
Institute for Advanced Study

Workshop

Interactive Sonification Workshop (ISon) 2022

Psychoacoustics in the Loop

Delmenhorst, 22. – 23. Sep 2022

Organizers:

Tim Ziemer, University of Bremen, Germany

Thomas Hermann, Bielefeld University, Germany

Roberto Bresin, KTH Royal Institute of Technology, Sweden

Niklas Rönnerberg, Linköping University, Sweden

Sara Lenzi, Delft University of Technology, Netherlands

Venue:

Hanse-Wissenschaftskolleg
Institute for Advanced Study

Lemkuhlenbusch 4

27753 Delmenhorst

Germany

www.h-w-k.de

Program

Thursday, 22nd September 2022

09:30 – 10:00 **Registration and Coffee**

10:00 – 10:30 **Welcome**

10:30 – 11:15 **Keynote Speech: “Peripheral Sonification”**
Katharina Groß-Vogt, *University of Music and Performing Arts, Graz, Austria*

11:15 – 11:35 *COFFEE BREAK*

Paper Session 1: Interactive Motion Sonification; Session Chair: Dennis Reinsch (11:35 – 12:55)

11:35 – 11:55 **[A Real-Time Movement Sonification Application for Bodyweight Squat Training \(Online\)](#)**
Cherelle Connor, Aalborg University, Denmark

11:55 – 12:15 **[A Real-Time Embodied Sonification Model to Convey Temporal Asymmetry During Running](#)**
Thomas Albert Rushton, Aalborg University, Denmark

12:15 – 12:35 **[Visualization vs. Sonification to Level a Table](#)**
Tim Ziemer, University of Bremen, Germany

12:35 – 12:55 **[Sonifying Walking: A Perceptual Comparison of Swing Phase Mapping Schemes](#)**
Prithvi Ravi Kantan, Aalborg University, Denmark

12:55 – 13:55 *LUNCH BREAK*

Paper Session 2: Auditory Awareness; Session Chair: Prithvi Ravi Kantan (13:55 – 15:15):

13:55 – 14:15 **[Facilitating Reflection on Climate Change Using Interactive Sonification \(Online\)](#)**
David Larsson Holmgren, KTH Royal Institute of Technology, Sweden

14:15 – 14:35 **[The Information Capacity of Plausible Auditory Augmentations: Percussion of Rectangular Plates](#)**
Marian Weger, University of Music and Performing Arts, Graz, Austria

14:35 – 14:55 [**Interacting with Sonifications: The *mesonic* Framework for Interactive Auditory Data Science**](#)

Dennis Reinsch, Bielefeld University, Germany

14:55 – 15:15 [**Pure Covidata: An Automated Sonification of the COVID-19 Pandemic's Recent State \(Online\)**](#)

Izaak Thompson, Iowa City, IA

15:15 – 15:35 *COFFEE BREAK*

15:35 – 16:20 **Keynote Speech: “Binaural and Loudspeaker-based Auditory Displays”**

Jonas Braasch, Rensselaer Polytechnic Institute, Troy, NY, USA

16:20 – 16:40 *BREAK*

Demo and Poster Session (16:40 – 18:00):

[**Concurrent Sonification of Different Percentage Values: The Case of Database Values About Statistics of Employee Engagement**](#)

Gion van den Broek, Eindhoven University of Technology, Netherlands

[**Mapping in the Emergency: Designing a Hyperlocal and Socially Conscious Sonified Map of COVID-19 in Suffolk County, New York \(Online\)**](#)

Margaret Schedel, Stony Brook University, NY, USA

[**Multisensory Interactions and Sonification of Immunology Data for Blind and Low Vision Audiences \(Online\)**](#)

Stu Favilla, Swinburne University of Technology Australia / Erica Tandori, Monash University, Australia

Psychoacoustic Sonification for Image-Guided Skull Surgery (Demo)

Tim Ziemer, University of Bremen, Germany

Interactive sonification of images

Niklas Rönnerberg, Linköping University, Sweden

18:00 – 20:00 *DINNER*

Friday, 23rd September 2022

- 09:30 – 10:00 **Keynote Speech: “Sound Design versus Auditory Display – their Application Perspectives in Education, Medicine, Art and Technology”**
Bozena Kostek, Gdansk University of Technology, Poland
- 10:00 – 10:30 **Keynote Speech: “Designing Sounds For Tomorrow”**
Renzo Vitale, BMW Group Munich, Germany
- 10:30 – 11:00 **Keynote Debate with Renzo Vitale and Bozena Kostek: Challenges and Future in Research and Practice of Sound Design**
Moderator: Sara Lenzi
- 11:00 – 11:20 *COFFEE BREAK*
- 11:20 – 12:20 **Parallel Workshops 1**
Renzo Vitale: [Ease, safe, adapt! \[In presence only\]](#)
Steffen Kleinert & Tim Ziemer: [ICAD2023: Sonic Tilt Competition – Implementing your own Sonification in an Android Spirit Level App](#)
- 12:20 – 13:20 *LUNCH*
- 13:20 – 14:20 **Continuation of Parallel Workshops 1**
- 14:20 – 14:40 **Presentation / Discussion of Workshop 1 results**
- 14:40 – 15:00 *COFFEE BREAK*
- 15:00 – 17:00 **Parallel Workshops 2**
Jonas Braasch: [Where is my Sound? Binaural Auditory Display](#)
Marian Weger: [Schrödinger’s Box](#) [In presence only]
- 17:00 – 17:20 **Presentation / Discussion of Workshop 2 results**
- 17:20 – 18:00 **Closing Words (Announcement of Best Student Paper Award, Upcoming Events, Special Issues, Open Discussion, ...)**
- 18:00 – 20:00 *DINNER*