



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](http://www.h-w-k.de)

Program

# Thursday, 22<sup>nd</sup> 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 (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 (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, 23<sup>rd</sup> 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: 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*