

**Scientific Program**  
**2<sup>nd</sup> of March, 2023, AM 2**

<b>Session 1 - Track A</b>		
<b>Auditory Technology 1</b>		
<b>Time</b>	<b>Chair:</b>	
9:00	14	<i>L.-M. Simon, F. Denk, H. Husstedt</i>
		Design and evaluation of a Hearing Aid Demonstrator
9:12	38	<i>F. Hettler, F. Denk, H. Husstedt</i>
		Acoustic Feedback Path of Hearing Aids related to Insertion Gain
9:24	71	<i>I. Borschke, M. Orf, J. Obleser</i>
		How is loudness of amplitude-compressed speech evaluated? A comparison between the RMS method and Zwicker's algorithm
9:36	18	<i>J. Herrmann, L. Fiedler, D. Wendt, S. Santurette, T. Jürgens</i>
		Ocular Biomarkers of Listening Effort in Experienced Hearing Aid Users in Darkness and Light
9:48	68	<i>P. A. Alba Diaz, R. Pallenberg, A. Mertins</i>
		Evaluating different EEG systems for auditory attention decoding
10:00	98	<i>T. Hartmann, S. Anders, J. Tchorz</i>
		Data-driven analysis of harbour porpoise echolocation clicks
10:15	Coffee Break	
10:30	Postersession Jury	
<b>Session 2 - Track A</b>		
<b>Auditory Technology 2</b>		
<b>Time</b>	<b>Chair: Prof. Dr. Jürgen Tchorz</b>	
11:00	27	<i>H. Meineke, J. Obleser, M. Wöstmann</i>
		Immediate and Longitudinal Benefit of Unilateral Cochlear Implantation on Spatial Listening
11:12	85	<i>K. M. Kogel, M. Hey, T. Jürgens</i>
		Design of a multidimensional outcome measure test battery for cochlear implant patients
11:24	61	<i>M. Reinhold, D. Hollfelder, J. Tchorz</i>
		Quality Assurance in Cochlear Implant Rehabilitation – Development of a Protocol –
11:36	63	<i>M. Harries, L. Jäger, H. Husstedt</i>
		Update of the Freiburg monosyllabic speech test on the basis of word frequency distribution
11:48	66	<i>S. Langenbacher</i>
		Development of a study environment for school-aged children implanted with Cochlea Implants
12:00	94	<i>T. Günther, S. Meier</i>
		A comparison of different methods of conducting a childrens test for speech understanding
12:15	Lunch Break	

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<b>Session 3 - Track A</b>		
<b>Biomedical Engineering 5</b>		
<b>Time</b>	Chair: Prof. Dr. Max Urban	
13:15	100	<i>A. F. Wolf, J. Schöler, T. Graßl, M. Urban</i>
		Determination and Evaluation of the Connection Process and Speed of the Communication Protocols UART, I <sup>2</sup> C and SPI for given Ultra-Low Power Hardware with Limited CPU Power
13:27	74	<i>A. Răileanu, L. Lilaj, S. Coen</i>
		Implementation of process validation for the application of gel wax phantom manufacturing process
13:39	122	<i>N. Neupane, K. Krajewski, C. Damiani</i>
		Development of a in-vitro model mimicking mechanical properties of brain cortex tissue
13:51	119	<i>R. Catena, K. L. Krajewski, C. Damiani</i>
		Experimental setup for the investigation of forces and displacements during brain surgery using medical phantoms
14:03	101	<i>A. Tiurin, J. Ehrhardt</i>
		Generation of an average brain template conditioned on age
14:15	8	<i>C. Avendaño Mejía, Y. T. Böge</i>
		Regulatory strategy for market introduction of an IoT-based laboratory sample tracking system for Access to the United Kingdom market
14:30	Coffee Break	
<b>Session 4 - Track A</b>		
<b>Signal Processing</b>		
<b>Time</b>	Chair: Prof. Dr. Alfred Mertins	
14:45	64	<i>K. Lühring, G. Amorós-Figueras, J. Rosell-Ferrer</i>
		Electrical Bioimpedance Spectroscopy for the characterization of the tissular properties of the myocardium using a transcatheter method
14:57	127	<i>F. Jorczik, M. Eulers, A. Mertins</i>
		Speech Emotion Recognition Using wav2vec 2.0 Embeddings
15:09	49	<i>M. Aboeljereed</i>
		Fast and High-Resolution Synthetic Aperture Radar Mapping with a Multi-Radar System
15:21	114	<i>P. Petri, A. Yaqout, H. Hellbrück</i>
		Development of a Sensor Prototype for Monitoring Wireless Communication