Program for Acoustic Communication 2024

Location: BI field station, Svanninge Bjerge, Marine Biological Research Center in Kerteminde & Department of Biology, SDU, Odense

Time	Sat Aug 3	Sun Aug 4	Mon Aug 5	Tues Aug 6	Wed Aug 7	Thu Aug 8	Fri Aug 9	Sat Aug 10
8-9		**JCD**: Introduction to the sound field	**CE:** Recording equipment: a basic setup	**CE**: Analysis software options	*Transfer to Kerteminde (7.30)*	*Transfer to Kerteminde (7.30)*	**JT**: Theoretical psychophysics	Presentations of labs E-H
9-10		**LJ**: Microphone essentials	Basic labs A-D (Teams 3-4-1-2)	**MJ**: SA1 – How to measure signals and noise	**MW**: Hydrodynamic sound field	**JT**: Passive monitoring	**KH**: Practical psychophysics	**LJ:** Array recording principles
10-11		**MW**: dB exercises			**PTM**: Hydrophones and the sonar equation	**JT**: Anthropogenic noise	Data analysis of labs E-H	Sound recordings in the field
11-12			Basic labs A-D (Teams 4-1-2-3)		**PTM**: SA3 - Clip levels and received level	**JT**: SA4 - Noise analysis		
12-13	Arrivals and registration. Exploring the site	*Lunch*		*Lunch*	*Lunch*	*Lunch*	*Lunch,* ***Group photo***	*Lunch*
13-14		Basic labs A-D (Teams 1-2-3-4)	*Lunch*	**MJ**: SA2 – Filters and filtering	UW Labs E-H (Teams 1-2-3-4)	UW Labs E-H (Teams 3-4-1-2)	**JT/CR**: Psycho-physics ROC exercise	*Afternoon off*
14-15			Data analysis of basic labs					
15-16		Basic labs A-D (Teams 2-3-4-1)			UW Labs E-H (Teams 2-3-4-1)	UW Labs E-H (Teams 4-1-2-3)		
16-17				Presentation preparation			Presentation preparation	
17-18		Data analysis of basic labs		Presentation of labs A-D	Data analysis of labs E-H	Data analysis of labs E-H	Presentation of labs E-H	
18-19	*Dinner*	*Dinner*	*Dinner*	*Dinner*	*Dinner*	*Dinner*	*Dinner*	*Dinner*
19.00-19.45	Welcome + Presentation of teachers and students	Poster session featuring participants' projects	**JCD**: Sound perception	**LJ**: Bat echolocation	TBA	**MW:** Underwater hearing	**JT**: ROC evaluation	*Evening off*
19.45-20.30			**IA:** Songbirds	**LJ**: Bat excursion	*Transfer to Svanninge*	**CR:** Acoustic communication		
…						*Transfer to Svanninge*		

CE: Coen Elemans; **CR:** Colleen Reichmuth; **EFM:** Elodie Floriane Mande-Briefer; **IA:** Iris Adam; **JCD**: Jakob Christensen-Dalsgaard; **JHR**: Jeppe Have Rasmussen; **JT**: Jakob Tougaard; **KB**: Kristian Beedholm; **KV**: Karsten Vesterholm; **LJ**: Lasse Jakobsen; **MJ**: Mark Johnson; **MW**: Magnus Wahlberg; **NM**; Nicolas Mathevon; **ONL**: Ole Næsbye Larsen; **PTM**: Peter Teglberg Madsen; **SAZ**: Sue Anne Zollinger; **TA**: Tommi Anttonen.

In-air labs -Svanninge

Basic lab **A**. **LJ**: Microphone calibration

Basic lab **B. KV**: Loudspeaker essentials

Basic lab **C**. **CE**: Recording sounds

Basic lab **D. JCD**: Measuring vibrations JCD/ONL

Underwater labs-Kerteminde

Underwater lab **E**. **JT:** Hydrophone calibration

Underwater lab **F. PTM**: Source level of seal growl

Underwater lab **G**. **MW**: Ambient noise

Underwater lab **H. MJ**: Prey capture using D-tag

Technical lectures

Signal analysis exercises

Sound measuring labs

Bioacoustics topics

Student presentations

Program for Acoustic Communication 2024

Time	Sun Aug 11	Mon Aug 12	Tue Aug 13	Wed Aug 14	Thu Aug 15	Fri Aug 16
8-9	Transfer to SDU	**SAZ**: Common parameters in papers & pitfalls	**JHR:** machine learning	**KB**: SA7 – Spectrogram optimization	**LJ/JCD:** Analysis of field recordings	Pack-up and clean
9-10	Demonstrations 1-4	**SAZ***:* SA5 - Common parameters in bioacoustics	**JHR**: SA6 – Machine learning			
10-11				Presentation preparation		Evaluation part II, certificates, and farewell
11-12						
12-13	*Lunch*	*Lunch*	*Lunch.**Group photo***	*Lunch*	*Lunch*	
13-14	Demonstrations 1-4	Advanced labs I-L (Teams 1-2-3-4)	Advanced labs I-L (Teams 3-4-1-2)	Presentation of labs I-L	Presentation preparation	
14-15				**LJ/JCD:** Analysis of field recordings		
15-16		Advanced labs I-L (Teams 2-3-4-1)	Advanced labs I-L (Teams 4-1-2-3)		Presentation of field recordings	
16-17	Evaluation part I					
17-18	Transfer to Svanninge	Data analysis of advanced labs	Data analysis of advanced labs		*Free time*	
18-19	*BBQ*	*Dinner*	*Dinner*		Party prepping	
19.00-19.45		**NM**: TBA	**EFM:** Vocal expression of emotions	*Excursion to Naturama*	*Party!!*	
19.45-20.30		**ONL:** Sound degradation				
…					*To ∞ and beyond…*	

<u>Demonstrations SDU</u>

Demonstration **1. LJ**: Windtunnel

Demonstration **2. JCD**: Laser Doppler vibrometry

Demonstration **3. TA**: Auditory Brainstem response

Demonstration **4. IA**: High-throughput sound recording

<u>Advanced lab - Svanninge</u>

Advanced lab **I**. **SAZ**: Playback calibrated signals

Advanced lab **J. JCD**: Enclosure acoustics

Advanced lab **K**. **ONL**: Transmission loss in the field

Advanced lab **L. LJ**: (Un)wanted reflections