

ICES WGFAST, MFRI, Hafnarfjörður, Iceland, 8-11 April 2025

Icelandic Time = UTC	Tuesday 8 April	
08:15	Departure from Reykjavik	
08:45	Arrival at MFRI	
09:15	Opening - Þorsteinn Sigurðsson, Director of the MFRI	
09:40	Tribute to Eric Armstrong, on behalf of Phil Copland and Paul Fernandes	
10:00	Posters flash presentations (1 slide per poster): 5 posters	
	Sessions 2 : Acoustic methods to characterize populations, ecosystems, habitat, and behaviour - Chairs: Laure Barbin, Geir Pedersen, Alina Wieczorek	
10:20	Decadal spatiotemporal distribution of anchoveta (<i>Engraulis ringens</i>) in the Peruvian marine ecosystem between 1985-2024	Ramiro CASTILLO et al.
10:40	Pacific warm pool ecosystem characterized with hull-mounted acoustics and environmental variables	Laure BARBIN et al
11:00	Break	
11:20	Monitoring the effects of a storm on near-surface anchovy using a glider-mounted echosounder	Guillermo BOYRA et al.
11:40	Follow the Fish	Stéphane GAUTIER et al.
12:00	Fine-Scale Variability in Prey Distribution and Its Influence on Goose-beaked Whale Presence in Southern California	Shannon DOLAN et al.
12:20	Lunch	
14:00	Herding of Antarctic krill (<i>Euphausia superba</i>) inside a trawl	Laura DIERNÆS et al.
14:20	Sensor fusion for rapid biomass estimates of <i>Calanus</i> sound scattering layer.	Muriel DUNN et al.
14:40	Effects of diel behavior on the accuracy and efficiency of acoustic-trawl surveys of small pelagic fishes off Northwest Mexico	Juan VALLARTA-ZARATE et al., David DEMER presenting (Remote)
15:00	A review of multifrequency split-beam applications to aquatic ecosystem science	David DEMER et al. (Remote)
15:20	Break	
	Sessions 1 : Acoustic characterization of marine organisms - Chairs: Laure Barbin, Geir Pedersen, Alina Wieczorek	
	Acoustic Backscattering from Gas and Liquid-Filled Prolate Spheroids Across a Wide Frequency Range and All Incident Angles:	Babak KHODABANDELOO et al.
15:40	Applications in Fisheries Acoustics with Open-Source Software	
16:00	Acoustic Discrimination of Herring and Sprat Aggregation	Aleksander ŻYTKO et al.
16:20	Categorization of acoustic backscatter of krill in Icelandic waters	Teresa DA SILVA & Hildur PETURSDOTTIR
16:40	An envelope-based acoustic classification method for krill in the California Current	Juan ZWOLINSKI et al. (Remote)
17:00	End of the presentations	
17:20		
18:00	Cocktail Ægir - with poster presentations	
20:00	Bus to Reykjavik	

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Icelandic Time = UTC	Wednesday 9 April	
08:15	Departure from Reykjavik	
08:45	Arrival at MFRI	
	Sessions 2 : Acoustic methods to characterize populations, ecosystems, habitat, and behaviour - continued - Chairs: Laure Barbin, Geir Pedersen, Alina Wieczorek	
09:10	Automated detection and tracking of fish in Scottish rivers using ARIS sonar data	Roland PROUD et al. (Remote)
09:30	Omnidirectional sonar helps to understand anchovy behavior in the Northern Humboldt Current System	Daniel GRADOS et al.
09:50	A step forward quantifying micronekton within deep layers with a combination of acoustics and trawls	Ghjuvan SANTONI et al. (Remote)
10:10	Charactering and monitoring, a large, unique and enigmatic fish spawning aggregation in the deep sea	Ben Scouling et al.
10:30	Break	
10:50	Bridging the gap in fish data time series in offshore wind farm wake areas using seabed multi-instrument platforms	Julie SALVETAT et al. (Remote)
11:10	Preliminary results on fish behaviour in the mouth of a deep-water shrimp (<i>Pandalus borealis</i>) trawl	Kjetil THORVALDSEN & Junita KARLSEN
11:30	EK80 transducers calibration within [4-20]°C temperature range and [1-400] bar pressure range	Naïg LE BOUFFANT et al.
	Session 3 : Emerging technologies, methodologies and protocols - Chairs: Muriel Dunn, Stéphane Gauthier, Naïg Le Bouffant	
11:50	The Sonophore – an autonomous vertically-profiling multi-frequency echosounder system	Ryan DOWNIE et al.
12:10	Advancing <i>In Situ</i> Acoustic Measurements of Deep-Sea Squid: Bridging Data Gaps for Modeling Beaked Whale Prey Availability	Shannon DOLAN et al.
12:30	Lunch	
14:00	Impact of USV movements on acoustic data: attenuation and bubbling	Naïg LE BOUFFANT et al.
14:20	Noise in the EK80/333-kHz channel can be greatly reduced	Rolf KORNELIUSSEN et al.
14:40	LSST in CRIMAC	Inge ELIASSEN et al.
15:00	Use of artificial intelligence in the analysis of industry echosounder data	Luca POSSENTI et al.
15:20	Break	
15:40	NOAA Fisheries Active Acoustics Strategic Initiative on AI and model-based echo classification	Michael JECH et al. (Remote)
16:00	Automatic Detection of Fish Schools in Acoustic Data by Two Methods: Double thresholding and Deep learning.	Lilia GUILLET et al.
16:20	Deep learning methods for acoustic target classification	Ingrid UTSETH et al.
16:40	EchoSMS - open-source fisheries acoustics scattering models	Gavin MACAULAY & Michael JECH
17:00	End of the presentations	
17:20		
17:40	Bus to Reykjavik	

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Thursday 10 April

08:15 Departure from Reykjavik

08:45 Arrival at MFRI

Session 3 : Emerging technologies, methodologies and protocols - continued - Chairs: Muriel Dunn, Stéphane Gauthier, Naïg Le Bouffant

09:10 Towards remote acoustic monitoring of marine ecosystems

Laurent BERGER et al.

09:30 Implementing uncrewed surface vehicles in existing acoustic trawl surveys: data infrastructure, remote operating centre, edge computing, data compression and transfer, data quality monitoring, and automated target classification

Nils Olav HANDEGARD et al.

09:50 Investigating the use of fisheries multibeam echosounders for survey-optimisation, decision making, and species characterisation

Yoann LADROIT et al.

10:10 Data-Driven AUV Path Planning for Hybrid Acoustic-Magnetic Induction Underwater Communication

Mandana MAHGOLI et al.

10:30 Break

Combining autonomous observation platforms, remote sensing, and simulation modelling to monitor the copepod *Calanus finmarchicus*

Pierre PRIOU et al

11:10 Benthopelagic-mesopelagic species: who are they and how can we study them

Marian PENA & Gaël CHAUCHADIS (Remote)

11:30 Looks Easy, Sound's Hard: Challenges for Image Segmentation on Acoustic Data

Joel BRAND

11:50 Update from the WGFAST terminology subgroup

Toby JARVIS et al.

12:30 Lunch

14:00 Transforming raw acoustic and trawl data into biological information using an end-to-end, cross-platform data processing pipeline

Wu-Jung LEE et al.

14:20 Variability and influence of fisheries acoustic echogram annotations on machine learning applications

Wu-Jung LEE et al.

14:40 A compilation of test data sets for applications of broadband echosounders with accompanying data processing pipeline
Combining Forces: Using Acoustics and Environmental DNA Metabarcoding to Investigate Mid-Trophic Level Organisms in the Ross Sea

Tonje FORLAND et al., Geir PEDERSEN presenting
Alina WIECZOREK et al.

15:20 Break

15:40 OceanStream: A cloud-native platform for hydroacoustic data processing and analysis

Andrei RUSU et al.

16:00 An edge-to-cloud pipeline for echogram semantic segmentation using deep learning

Katja OVCHINNIKOVA et al.(Remote)

16:20 Echopop: An open-source software package for acoustics-based population estimates and biological inversion

Brandyn LUCCA et al. (Remote)

16:40 Echofilter 2.0: The echogram event horizon

Angus GALLOWAY et al.

Business

17:00 Appointment of new chair for 2026-2028

End of the working day

17:30 Departure to ship visit then conference dinner

21:30 Bus departure to Reykjavik

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Friday 11 April

08:15 Departure from Reykjavik

08:45 Arrival at MFRI

Business meeting - draft

09:30 Summaries of work shops

09:40 ICES WG of interest for WGFAST

10:00 ASC 2025, 2026

10:20 Requirements for the end of the 2023-2025 period

Break

11:00 Terms of Reference for 3 nexts years

11:20

11:40 Venue for 2026, host ?

End of the WGFAST meeting

Lunch

13:40

14:00 Bus to Reykjavik