



38th SCANDINAVIAN SYMPOSIUM ON PHYSICAL ACOUSTICS

GEILO HOTEL 1 – 4 February 2015

PROGRAM

Sunday: Some possible train arrivals: 18:56 from Bergen, and 15:38 and 18:52 from Oslo.

Dinner is served from 19:00

Opening 21:30

Monday morning 4 talks

- 8:15 – 8:40 Rolf Korneliussen
Complementary density estimates of fish layers with echo sounder and scientific sonar
- 8:40 – 9:05 Helge Balk
Surface induced errors in target TS and depth observed with horizontally aligned transducers for fisheries acoustics.
- 9:05 – 9:25 Coffee
- 9:25 – 9:50 Ievgen Koliada
Oscillations of position and TS under the surface
- 9:50 – 10:15 Pedersen, Geir
Efficient BEM for acoustic scattering with application to fish

10:15 – 15:45 Time available for skiing and lunch. **Lunch served 13:00 – 14:30.** Note that restaurant close at 14:30. It is possible to make lunch bag during breakfast.

Monday afternoon 7 talks

- 15:45 – 16:10 Isabel Pérez-Arjona
TS measurements and simulations of Mediterranean sea turtles
- 16:10 – 16:35 Jens Martin Hovem
Measurements and analysis of underwater acoustic noise of fishing vessels
- 16:35 – 17:00 Patricia Ordoñez
Aperture considerations for parametric echosounding
- 17:00 – 17:25 Coffee
- 17:25 – 17:50 Ole Lorentzen
Effects and compensation techniques of snaking for a towed sonar array on an AUV
- 17:50 – 18:15 Søvik, A. A., Andersen, K. K., Lunde, P. and Vestrheim, M.,
Characterization of ultrasound transmit-receive measurement systems in air. Comparison of finite element modelling and experimental measurements
- 18:15 – 18:40 Sven Ivansson, Per Morén, Torbjörn Ståhlsten
Seismo-acoustic wave propagation in ice in the Baltic Sea
- 18:40 – 19:05 Karl-Thomas Hjelmervik, Henrik Berg
Automatic classification for mid-frequency sonars in a littoral environment

Dinner is served at 19:00

Tuesday morning 4 talks

- 8:15 – 8:40 Halvor Hobæk
Numerisk beregning av refleksjonskoeffisient fra en stabel av plane, elastiske plater over et elastisk substrat
- 8:40 – 9:05 Andersen, K. K., Søvik, A. A., Lunde, P. and Vestrheim, M.,
Reciprocity calibration method for ultrasonic piezoelectric transducers in air. Comparison of finite element modelling and experimental measurements
- 9:05 – 9:25 **Coffee**
- 9:25 – 9:50 Ole Marius Hoel Rindal
Understanding Contrast Improvements from Capon Beamforming for Ultrasound Imaging
- 9:50 – 10:15 Torstein Yddal
Optically transparent ultrasound transducers
- 10:15 – 15:45 **Time for skiing and lunch. Lunch served 13:00 – 14:30. Restaurant closes at 14:30.**

Tuesday afternoon 7 talks

- 15:45 – 16:10 Sverre Holm
Four ways to interpret temporal memory operators in the wave equation
- 16:10 – 16:35 Espen Storheim (CMR), Kjetil D. Lohne (CMR) og Torbjørn Hergum (BTC/Archer)
Transmission and reflection for a layered media in water. Measurements and simulations
- 16:35 – 17:00 Magne Aanes, Kjetil Daae Lohne, Per Lunde and Magne Vestrheim
Beam transmission of water-embedded steel plate at normal incidence. Diffraction effects in the S1 to A3 region.
- 17:00 – 17:25 **Coffee**
- 17:25 – 17:50 Sæther, M. and Lunde, P.
Sound velocity measurement method for porous sandstone. Discussion and preliminary results
- 17:50 – 18:15 Vikash Pandey
Spatial dispersion of shear waves in a tempered Eringen's nonlocal bar
- 18:15 – 18:40 Erlend Magnus Viggen (SINTEF ICT), Tonni Franke Johansen (SINTEF ICT) og Ioan-Alexandru Merciu (Statoil)
Simulation and modelling of ultrasonic double-casing well logging
- 18:40 – 19:05 Marek Moszyński
Nonstandard finite difference scheme for Helmholtz wave equation

Dinner is served from 19:00 - 21:00**Tuesday evening 21:30 Applied fluid dynamics - voluntary contributions****Wednesday morning 4 talks (no break)**

- 9:00 – 9:25 Gunnar Taraldsen
The decibel and Ars Conjectandi
- 9:25 – 9:50 Kristoffer Johansen
Radial oscillations of microscopic Antibubbles
- 9:50 – 10:15 Michiel Postema
Fluid dynamics
- 10:15 – 10:40 Knut Waagan
Mapping low frequency blast noise in a Norwegian terrain
- 10:40 – 11:05 Lunde, P.,
Volume backscattering of finite-amplitude acoustic waves: Power flow, sampled volume, and scattering cross section

Lunch served from 11:00