

**3rd Norway-Scotland Waves Symposium 16-17 Sept. 2013**  
The Norwegian Academy of Science and Letters, Drammensvn. 78, Oslo  
Chairs: Prof. J. Grue (Univ. of Oslo) and Prof. P. A. Davies (Univ. of Dundee)

**Program**

Monday 16 September

830 Coffee. Registration

900-910 J. Grue: Welcome and opening remarks

Session 1. Chair: J. Grue

910-930: J. E. H. Weber, K. H. Christensen and G. Broström (Norway/Sweden): Stokes drift in internal equatorial Kelvin waves; continuous stratification versus two-layer models.

930-950 D. G. Dritschel, S. E. King and M. Carr (UK): New advances in the simulation of 2D stratified flows.

950-1010 A. Ali and H. Kalisch (Norway): Reconstruction of the pressure in long-wave models with constant vorticity.

1010-1020 Discussion

1020-1040 Break

Session 2. Chair: P. A. Davies

1040-1100 L. Boegman, P. Aghsaee and A. Dorostkar (Canada): Multiscale research on 3D dynamics of nonlinear internal wave and topography interaction.

1100-1120 M. Stastna (Canada): Internal wave boundary layer interaction: two novel mechanisms for instability.

1120-1140 J. Verschaeve, G. K. Pedersen, E. K. Lindstrøm (Norway): Scale effects and stability of viscous boundary layers in wave tank experiments.

1140-1150 Discussion

1150-1200 Short break

Session 3. Chair: G. K. Pedersen

1200-1220 H. M. Fritz, B. C. McFall and F. Mohammed (USA): Three-dimensional physical modeling of granular landslide tsunami generation in various scenarios.

1220-1240 N. Pujara and P. L.-F. Liu (USA): Direct measurements of bottom shear stress and runup induced by solitary waves.

1240-1250 Discussion

1250-1340 Lunch

Session 4. Chair: A. Jensen

1350-1410 B. Gjevik, S. Bondevik and M. B. Sørensen (Norway): Seiches in Norwegian fjords generated by distant earthquakes.

1410-1430 C. B. Harbitz, G. K. Pedersen and S. Glimsdal (Norway): Åkerneset, the threat from an unstable rockslope in Storfjorden, Western Norway. A review of research and civil protection issues.

1430-1450 E. K. Lindstrøm, A. Jensen, G. K. Pedersen and S. Glimsdal (Norway): Experiments on tsunamis generated by a block-slide in an 1 in 500 fjord model.

1450-1500 Discussion

1500-1530 Break

Session 5. Chair: R. H. Grimshaw

1530-1550 M. Carr, P. A. Davies and R. Hoebers (UK/The Netherlands): Experiments on the structure and stability of mode 2 internal solitary-like waves.

1550-1610 A. Brandt and K. R. Shipley (USA): Mass transport by large and very-large amplitude mode-2 internal solitary waves: experimental observations.

1610-1630 M. Palmer (UK): Does differing internal wave forcing drive variable behaviour in pycnocline mixing?

1630-1650 P. J. Diamessis and S. Wunsch (USA): Nonlinear generation of harmonics through the interaction of an internal wave beam with a model oceanic pycnocline.

1650-1700 Discussion

1700-1730 Break

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Session 6. Chair. J. H. Lacasce

1730-1750 G. Ivey (Australia): Internal tides on the Australian North West Shelf: from generation to breaking.

1750-1810 N. Stashchuk, V. Vlasenko and M. E. Inall (UK): Three dimensional dynamics of baroclinic tides in the Celtic Sea on the results of in-situ observations and numerical modelling.

1810-1830 D. L. Aleynik and M. E. Inall (UK): Internal waves generation and decay in Celtic Sea.

1830-1850 M. E. Inall, M. Porter, E. Dumont, D. Aleynik, T. Sherwin and D. Smeed (UK): How well do autonomous gliders capture the internal tide?

1850-1900 Discussion

1900 Tore Magnus Taklo: Trumpet Fanfare

1905 Drinks

1930 Dinner in the Academy

Tuesday 17 September

830 Coffee

Session 7. Chair: K. Trulsen

900-920 T. M. Taklo, K. Trulsen, O. Gramstad, H. E. Krogstad and A. Jensen (Norway): Direct measurement of dispersion relation for random surface gravity waves on deep water.

920-940 Ch. Kharif and R. Thomas (France): Modulated surface gravity waves on water of finite depth with constant vorticity.

940-1000 A. Lohrmann (Norway): Ocean Wave Measurements with Coherent Marine Radars using VV Polarization.

1000-1010 Discussion

1010-1025 Break

Session 8. Chair: Ch. Kharif

1025-1045 J. Berntsen, I. Darelius and H. Avlesen (Norway): Mixing in rotating and non-rotating lock release gravity currents down canyons.

1045-1105 A. C. Dale, M. E. Inall, C. Griffiths, V. Ivanov and T. Boyd (UK): The Loch Linnhe freshwater bore.

1105-1125 I.-C. Chan and P. L.-F. Liu (USA): Runup of interfacial waves on a plane beach.

1125-1135 Discussion

1135-1150 Break

Session 9. Chair: M. Inall

1150-1210 S. Falahat, J. Nycander and F. Roquet (Sweden): Comparison of computed internal tides to observed dissipation.

1210-1230 V. Vlasenko, C. Guo and N. Stashchuk (UK): A and B-type internal solitary waves in the northern South China Sea.

1230-1250 G. Jeans (UK): The application of internal wave physics to offshore engineering.

1250-1300 Discussion

1300-1345 Lunch

Session 10. Chair: G. Ivey

1350-1410 H. van Haren (The Netherlands): Energy release through internal wave breaking

1410-1430 I. Fer, J. D. Guthrie and J. H. Morison (Norway/USA): Internal waves and mixing in the Arctic Ocean.

1430-1450 A. Stålström, L. Arneborg, B. Liljebladh and G. Broström (Norway/Sweden): Observations of turbulence caused by a combination of tides and baroclinic mean pressure gradients over a fjord sill.

1450-1500 Discussion

1500-1515 Break

Session 11. Chair: J. Nycander

1515-1535 R. H. Grimshaw, K. Helfrich, C. Guo and V. Vlasenko (UK/USA): The combined effect of rotation and variable depth on internal solitary waves.

1535-1555 A. Rabitti, L. R. M. Maas, H. van Haren and T. Gerkema (The Netherlands): Internal waves and Equatorial Ocean dynamics.

1555-1615 J. Grue (Norway): Generation of interfacial large amplitude waves at topography in three dimensions. New computations.

1615-1625 Discussion

1625 Concluding remarks

1630 Adjournal