

CENS
Intensive week: “NONLINEAR WAVES AND APPLICATIONS”
Sept.13-18, 2004, Tallinn

Timetable

Tuesday , 14th September

10.00–12.00 Seminar – graduate students
12.00–13.00 Lunch
13.00–15.00 Seminar continues
15.00–15.15 Break
15.15–17.00 Consultations

Wednesday, 15th September

10.00–12.00 G.A. Maugin, *What do we understand by "Generalized" continua ?* – tutorial
12.00–13.00 Lunch
13.00–15.00 M. Braun, *Nonlinear elasticity theory* – tutorial
15.00–15.15 Break
15.15–16.45 Seminar – J. Kalda, P. Peterson, T. Soomere

Thursday, 16th September

10.00–12.00 F. Pastrone, *Mathematical models of microstructured solids (Cosserat, vectorial microstructure, etc.)* – tutorial
12.00–13.00 Lunch
13.00–15.00 Seminar – J. Engelbrecht, A. Salupere, A. Berezovski, A. Stulov,
15.00–15.15 Break
15.15–17.15 Seminar continues G.A. Maugin, M. Braun

Friday, 17th September

10.00–12.00 Seminar – F. Pastrone, A. Ravasoo, J. Janno
12.00–13.00 Lunch
13.00–15.00 Seminar “Future” – new ideas and forwardlooks – with everybody taking part

General information

- All meetings – CENS , Institute of Cybernetics at Tallinn University of Technology, Akadeemia tee 21, 12618 Tallinn
- Titles of seminar lectures — www.ioc.ee

Seminars

Tuesday, 14th September Seminar — graduate students

10.00–12.00

Andres Braunbrück	<i>Wave interaction resonances and weak material inhomogeneity</i>
Olari Ilison	<i>Solitons and solitary waves in microstructured solids</i>
Lauri Ilison	<i>Solitons and solitary waves in granular materials</i>
Mihhail Berezovski	<i>Elastic waves in linear and nonlinear periodic media</i>

13.00–15.00

Maksim Säkki	<i>The distribution of low-variability periods in human heartbeat dynamics</i>
Robert Kitt	<i>Scale invariance in financial time series: low variability periods</i>
Andrei Errapart	<i>Photoelastic Tomography in Linear Approximation</i>

Wednesday, 15th September Seminar 15.15–16.45

Jaan Kalda	<i>Scale invariance in turbulent diffusion</i>
Pearu Peterson	<i>Interaction solitons in soliton interactions</i>
Tarmo Soomere	<i>Nonlinear waves from fast ferries</i>

Thursday, 16th September Seminar 13.00–17.00

13–15

Jüri Engelbrecht	<i>Hierarchical modelling of wave motion in microstructured solids</i>
Andrus Salupere	<i>Soliton ensembles and their long-time behaviour</i>
Arkadi Berezovski	<i>Velocity at Discontinuity in Thermoelastic Solids</i>
Anatoli Stulov	<i>Piano hammer felt — microstructural material with memory</i>

15.15–17.15

Gérard A. Maugin	<i>Nonlinear surface waves on elastic bodies</i>
Manfred Braun	<i>to be confirmed</i>

Friday, 17th September Seminar 10.00–12.00

Franco Pastrone	<i>to be confirmed</i>
Arvi Ravasoo	<i>Wave interaction for NDE of inhomogeneous prestress</i>
Jaan Janno	<i>Solitary waves in Engelbrecht-Pastrone model of microstructure and related inverse problems</i>
