

Joint Mathematics-Physics Workshop on Asymptotic Analysis and related topics  
Department of Mathematics and Department of Physics  
University of Gothenburg, May 5-7, 2010

Wednesday May 5, MVL 15 Mathematical Sciences

9-10 Coffee, Registration

10.10-15 Short Welcome

10.15-10.45 Ingvar Lindgren: Developments in atomistic computations

11-12 Lars-Erik Persson: My life with Hardy and his inequalities

Lunch

14-15 Anders Holmbom: On some versions of two-scale convergence and their application

15-16 Stig Larsson: Finite Element Method for stochastic PDE

Coffee

16.30 -17.30 Hubert Nnang: Asymptotic analysis for weakly damped wave equation with application to a problem arising in elasticity

Thursday May 6, MVL 15 Mathematical Sciences

10-11 Gabriel Nguetseng: Homogenization of Navier-Stokes type equations

11-12 John Wyller: Weakly nonlocal limit of a one population neuronal field model

Lunch

14-15 Irina Pankratova: Homogenization of spectral problem for locally periodic elliptic operators with sign-changing density function

15-16 Niklas Wellander: Cloaking by change of variables in the fix frequency case

Coffee

16.30-17.30 Discussion

Dinner

Friday May 7, MVL 15 Mathematical Sciences

10-11 Andrey Piatnitski : Homogenization of fully non-linear equations in perforated domain with centered Fourier boundary condition.

11-12 Sigmund Selberg: Regularity properties of the Maxwell-Dirac equations

12-12.15 Fredrik Johansson: Simulations of Maxwell-Dirac and Schrödinger-Poisson

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