Workshop on Numerical Electromagnetics and Industrial Applications (NELIA 2011)

October 25 - 28, 2011
Faculty of Mathematics
Universidade de Santiago de Compostela, Spain

Presentation
Organizers Workshop Structure Programme Registration
Location
Acommodation Special Issue Sponsors Contact

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Programme Invited SpeakersPoster Session Schedule

Schedule

Time	Tuesday 25th	Wednesday 26th	Thursday 27th	Friday 28th
09:15-09:45	Reception			
	O. Biro			
	A. Alonso			
09:45-10:00	Opening			
10:00-10:45	I. Perugia			
	P. Dular			
	S. Chandler-Wilde			
	J. Rodríguez			
10:45-11:30	R. Hiptmair			
	G. Almandoz			
	P. Monk			

A. Bendali

11:30-12:00
coffee break
coffee break
coffee break
coffee break

12:00-12:45
E. Sonnendrücker

V. Selgas

D. Boffi

P. Joly

12:45-13:30
A-S. Bonnet
F. Rapetti

R. Rodríguez

F. Cakoni

13:30-16:00
lunch
lunch
lunch
lunch

16:00-16:45

F. Bay Cancelled

D. Moriñigo

Poster Session
R. Ordás

16:45-17:30
A. Bossavit
J. Porto

List of confirmed invited speakers

- Gaizka Almandoz Mondragon Unibertsitatea, Spain
Design and analysis of electrical machines using finite element method

- Ana Alonso Università degli Studi di Trento, Italy
Inverse source problems for eddy current equations

- François Bay Center for Material Forming (CEMEF), France
3-D Modelling and optimisation of induction heating procsses: some computational issues. Cancelled.

- Abderrahmane Bendali INSA, Toulouse, France
Extension to non-conforming meses of the combined current and charge integral equation

- Oszkar Biro Graz University of Technology, Austria
Finite element solution of nonlinear eddy current problems with periodic excitation and its industrial applications

- Daniele Boffi Università di Pavia, Italy
Exterior calculus and the finite element approximation of Maxwell's eigenvalues

- Anne-Sophie

Bonnet ENSTA, France
Time harmonic Maxwell equations with sign shifting coefficients: mathematical and numerical aspects

- Alain

Bossavit
Laboratoire de Génie Electrique de Paris, France Misgivings about the Maxwell tensor

- Fioralba Cakoni

University of Delaware
Transmission eigenvalues in inverse electromagnetic scattering theory

- Simon

Chandler Wilde
University of Reading, United Kingdom Asymptotic-numerical integral equation methods for high frequency scattering

- Patrick

Dular University of Liege, Belgium
Magnetic model refinements via finite element subproblems

- Ralf

Hiptmair

ETH-Zentrum, Switzerland Operator preconditioning

- Patrick

Joly

INRIA, France Mathematical and numerical modelling of piezoelectric sensors for non destructive testing by ultrasounds

- Peter

Monk
University of Delaware, USA Time dependent
integral equations: numerical methods and inverse problems

- Daniel
Moriñigo
CIDAUT, Spain The epgs
industrial process: numerical simulation and experimental validation

- Ramón Ordás
Ferroatlántica I+D, Spain
Numerical simulation of metallurgical processes wich arises in silicon industry

- Ilaria

Perugia

Universitá di Pavia, Italy Trefftz-discontinuous
galerkin methods for the time-harmonic Maxwell equations

- Javier Porto
ITAV, Spain
Analysis
through numerical simulations of the feasibility of plastic moulding
with heat induction systems

- Francesca

Rapetti

Université de Nice Sophia-Antipolis, France Comments on
the galilean limits of Maxwell's equations

- Jerónimo

Rodríguez

Universidade de Santiago de Compostela, Spain
Certified reduced basis method for radar cross section computation

- Rodolfo

Rodríguez

Universidad de Concepción, Chile Spectral approximation of the curl operator

- Virginia

Selgas

Universidad de Oviedo, Spain A symmetric bem-fem method for an axisymmetric eddy current problem

- Eric

Sonnendrücker

IRMA, Université de Strasbourg, France Arbitrary high-order Maxwell solvers based on spline discrete differential forms

Poster Session

- Edgar Blanco

AIMEN, Spain Validation of thermal simplidied models for induction heat forming applied for shipbuilding industry

- Lucas Chesnel

INRIA, France Radiation condition for a non-smooth interface between a dielectric and a metamaterial

- Sebastien Imperiale

INRIA, France Modelling of non-homogeneous lossy coaxial cable for time domain simulation

- Zixian Jiang

INRIA Saclay and CMAP Ecole Polytechnique, France Eddy current tomography of deposits in steam generators

- Jorge Naya
Universidade

de Santiago de Compostela

Numerical simulation of an induction heating system oriented to plastic moulding

- Marta Piñeiro
Universidade
de Santiago de Compostela
Thermo-magneto hydrodynamic simulation of industrial
induction furnaces

- Alicia Rodríguez

CIDAUT Foundation, Spain Numerical simulation using comsol of a linear induction electromagnetic pump to drive
molten aluminium

- Vladimír Vrábel
Gent University
An eddy current problem with a nonlinear boundary condition