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

Download our poster

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