Mini-symposium A5
Numerical Methods for Inverse Scattering Problems

Organizers:
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Fri - 9 Jan 2015 | 11:00 – 12:45 | Room 04-31, Block S16

Chair: Xudong Chen

11:00 A5-01 Keynote
Testing 3D Inversion Algorithms using Optimized FETI-FDP2 method against experimental data
I. Voznyuk, A. Litman, H. Tortel
Aix-Marseille Université, CNRS, Ecole Centrale, Institut Fresnel, Avenue Escadrille Normandie-Niemen, 13397 Marseille, France

11:30 A5-02 Invited
Fast Inverse Scattering Method for 3D Magnetodielectric Objects
Qing Huo Liu, Wenji Zhang, Zhiru Yu, Yunyun Hu, Yuan Fang, Jianyang Zho
Duke University

12:00 A5-03 Invited
A model-based inversion algorithm for electromagnetic data
Maokun Li1, Aria Abubakar2, Tarek M. Habashy3
1Tsinghua University, Beijing, China (On leave of absence from Schlumberger-Doll Research); 2Schlumberger, Houston, Texas, USA; 3Schlumberger-Doll Research, Cambridge, MA, USA

12:30 A5-04
Effective PDE-based and IE-based inversion methods with no forward solver for highly nonlinear inverse scattering problems
Yu Zhong1, Xudong Chen2
1A*STAR, Institute of High Performance Computing, 138632 Singapore; 2Dept. of Electrical and Computer Engineering, National University of Singapore, 117583 Singapore

Fri - 9 Jan 2015 | 14:00 – 15:30 | Room 04-31, Block S16

Chair: Yu Zhong

14:00 A5-05 Invited
Electromagnetic MUSIC imaging and 3-D retrieval of defects in anisotropic, multi-layered composite materials
G. Rodeghiero, M. Lambert, D. Lesselier, P.-P. Ding
Laboratoire des Signaux et Systèmes UMR8506 (CNRS-SUPELEC-Univ. Paris Sud) 3, rue Joliot Curie 91192 Gif-sur-Yvette cedex, France

14:30 A5-06 Invited
Quantitative Inverse Scattering with Sparseness Constraints - the Compressive Sensing paradigm
Nicola ANSELMI1, Lorenzo POLI1, Giacomo OLIVERI1, Andrea MASSA1,2
1ELEDIA Research Center@DISI, University of Trento, Via Sommarive 9, 38123 Trento, Italy; 2Digiteo Chair, Laboratoire des Signaux et Systèmes UMR8506 (CNRS-SUPELEC-UNIV. PARIS SUD), 3 rue Joliot-Curie, 91192 Gif-sur-Yvette cedex, France

15:00 A5-07
Imaging wave-penetrable objects in a finite depth ocean
Keji LIU, Yongzhi XU, Jun ZOU
Room203, Shanghai Key Laboratory of Financial Information Technology Shanghai University of Finance and Economics 777 Guoding Road, Shanghai, P.R.China, 200433

15:15 A5-08
Simultaneous reconstruction of the PEC and dielectric scatterers in through wall imaging application
Ye Xiuzhu
Beihang University, Beijing China