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WORKSHOP SECRETARIAT

oipe2016@uniroma3.it

WORKSHOP WEBSITE

<http://oipe2016.uniroma3.it>

Dear Colleagues

On behalf of the organizing committee, it is a great pleasure to announce that the 14th Workshop on Optimization and Inverse Problems in Electromagnetism IEEE OIPE 2016 will be held on September 13th-15th, 2016, in Rome, Italy.

The aim of OIPE, whose first edition was established in 1989, is to discuss advances and recent developments in optimization and inverse methods and their applications to the design and operation of electromagnetic devices. OIPE is an occasion for experts in electromagnetism and related areas of engineering, mathematics, physics, involved in research or industrial activities, to discuss the theoretical aspects and the technical relevance of optimization and inverse problems, in the general framework of the innovation in electromagnetism.

The workshop will offer an exciting technical program, with invited and contributed, oral or poster presentations. Prior to IEEE OIPE 2016, on September 12th, a PhD course will be organized by the PhD school "F. Gasparini", with the participation of eminent international professors.

Rome is one of the most famous sites around the world. A walking in the streets and squares of Rome means to pass across centuries and ages starting from 753 B.C. Fountains, monuments, parks, archeological sites, churches and Vatican State, but also modernity.

The Conference venue will be the Engineering Dept. of the Roma Tre University that is very close to two important historical sites: San Paolo Basilica and Cestia Pyramid and is very easy to be reached both from airports and from railways stations.

We invite members of the scientific community in universities, research centers and industry to attend the workshop and present their recent achievements.

We are looking forward to meeting all of you in Rome at IEEE OIPE 2016.

Alessandro Salvini
IEEE OIPE 2016 Chair

SCIENTIFIC TOPICS

1- Theoretical aspects and fundamentals

(a) Mathematical theory and formulation of inverse and optimization problems, (b) regularization techniques, (c) model order reduction, (d) identification problems, (e) sensitivity analysis, (f) new approaches.

2- Algorithms

(a) Reconstruction techniques, (b) deterministic, stochastic and hybrid techniques, (c) multi-objective and multi-level optimization, (d) heuristic approaches, (e) design of experiments, (f) constraint treatment, (g) robust optimization under uncertainty, (h) objective functions and direct problems, (i) numerical efficiency, (j) coupled problems; (k) new techniques.

3- Applications

(a) Optimal design in electrical and electronic engineering, (b) optimization in information and communication systems, (c) non-destructive evaluation, (d) industrial and biomedical tomography, (e) optimization in measurement systems, (f) optimization and inverse problems in biomedical engineering, (g) control systems, (h) large scale systems, (i) mechatronics, (j) nano- and microsystems, (k) renewable energy, (l) benchmark problems, (m) other applications.

4- Software methodologies

(a) Parallel and distributed computing, GPU computing, (b) soft computing and artificial intelligence, (c) new methodologies.

PRESENTATION

The workshop presentations will consist of invited lectures, oral and posters presentations. Prior to the OIPE 2016, an International PhD course will take place, in the same workshop site, focused on a topic falling in the field of interest of the Conference. The Course will be organized by the “Ferdinando Gasparini” PhD school with the participation of eminent international professors.

DIGEST

Authors are encouraged to submit a two-page digest due by January 18th, 2016. Online submission is required on the website: <http://oipe2016.uniroma3.it>.

All contributed papers will undergo a peer reviewing procedure to determine their suitability for presentation. Notification of the acceptance of the contribution will be given on June 1st, 2016. A template of the digest is available on the workshop website. Digests of contributions included in the workshop program will be part of the workshop proceedings.

POST CONFERENCE PUBLICATIONS

Authors of a selection of contributions will be invited to submit a full paper, that, depending on the content, will be considered for publication in COMPEL or IJAEM journals.

Manuscript submission deadline is Sept. 16th, 2016.

REGISTRATION FEES

	EARLY	LATE
REGULAR	500 €	600 €
STUDENT	350 €	450 €
ACCOMPANYING	150 €	200 €

- All registered Students can attend the PhD course on sept. 12th, free of further charge.
- Registration opening will be announced on the conference website.

IMPORTANT DATES

Digest submission opening	January 18 th	2016
Digest submission deadline	April 15 th	2016
Notification of acceptance	June 1 st	2016
End of early registration	July 20 th	2016
PhD course	Sept. 12 th	2016
Opening of the Workshop	Sept. 13 th	2016
Full paper submission	Sept. 16 th	2016