



Meeting on Discrete and Geometric Tomography and Applications to Computer Algorithms

Politecnico di Milano

April 22 - 23, 2010

Invited Speakers

- Peter Balazs** Department of Image Proc. and Computer Graphics, Univ. Szeged
Joost Batenburg Vision Lab, Department of Physics, University of Antwerp
Rosa Brancaccio Physics Department, University Bologna and INFN, Bologna
Stefano Brocchi University of Florence
Sara Brunetti Department Scienze Mat. e Inf, University of Siena
Mara Cercignani Neuroimaging Laboratory, Fondazione S. Lucia, IRCCS, Roma
Andrea Frosini Department of Sistemi and Informatica, University of Florence
Richard Gardner Western Washington University
Claudio Giani de Gotzen S.r.l. Company
Lajos Hajdu Institute of Mathematics, University of Debrecen
Christian Huck Department of Mathematics, University of Bielefeld
Antal Nagy Department of Applied Informatics, University of Szeged
Giorgio Pederzoli Catholic University, Milan

Scientific Committee

- ❑ **Alessandra Cherubini** → Politecnico di Milano – Dipartimento di Matematica
- ❑ **Paolo Dulio** → Politecnico di Milano - Dipartimento di Matematica
- ❑ **Carla Peri** → Università Cattolica di Milano
- ❑ **Giuseppe Baselli** → Politecnico di Milano - Dipartimento di Bioingegneria
- ❑ **Stefano Crespi Reghizzi** → Politecnico di Milano - Dipartimento di Elettronica
- ❑ **Marco Longinetti** → Università di Firenze – Ingegneria Agraria e Forestale

In cooperation with Dipartimento di Discipline Matematiche, Finanza Matematica ed Econometria dell'**Università Cattolica di Milano**

Organizing office

EVENTIMATE

Dipartimento di Matematica

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**Meeting on Discrete and Geometric Tomography,
and Applications to Computer Algorithms
PROGRAM**

Thursday, April 22, 2010 - Mathematics Department VI floor

2:45 - 3:00 PM **Welcoming Address**

3:00 - 3:55 PM **Richard Gardner**, *Western Washington University*
"Reconstruction from Covariograms and the Phase Retrieval Problem"

4:00 - 4:30 PM **Christian Huck**, *Department of Mathematics, University of Bielefeld*
"Uniqueness in Discrete Tomography of Delone Sets with Long-Range Order"

4:35 - 4:55 PM **Coffee Break**

4:55 - 5:25 PM **Antal Nagy**, *Department of Applied Informatics, University of Szeged*
"Applications in Discrete Tomography "

5:30 - 6:00 PM **Sara Brunetti**, *Dep. Scienze Mat. e Inf, University of Siena*
"Reconstruction algorithms for special lattice sets"

8:00 PM **Social Dinner**

In the *Antica Hostaria Della Lanterna*, a typical Restaurant in the center of Milano

Friday, April 23, 2010 - Mathematics Department VII floor

9:00 - 9:55 AM **Lajos Hajdu**, *Institute of Mathematics, University of Debrecen*
"Algebraic tomography and its applications"

10:00 - 10:30 AM **Joost Batenburg**, *Vision Lab, Dep. of Physics, University of Antwerp*
"Parameter estimation in tomography"

10:35 - 11:00 AM **Coffee Break**

11:00 - 11:55 AM **Mara Cercignani**, *Neuroimaging Lab., Fondazione S. Lucia, IRCCS, Roma*
"Magnetic Resonance Imaging: from basic principles to quantitative applications"

12:00 - 12:20 AM **Claudio Giani**, *de Gotzen S.r.l. Company*
"Advanced technologies applied to 3D diagnostic radiology in dentistry and maxillo-facial surgery by means of the WhiteFox Cone Beam Computed Tomography Scanner"

12:25 - 12:55 AM **Giorgio Pederzoli**, *Catholic University, Milan*
"Statistical Models for Functional and Structural Neuroimaging"

1:00 - 2:30 PM **Buffet-lunch Mathematics Department – II floor**

2:30 PM - 3:25 **Peter Balazs**, *Dep. of Image Proc. and Computer Graphics, Univ. Szeged*
"Binary Tomography with Geometrical Priors: Some Recent Results"

3:30 - 4:00 PM **Andrea Frosini**, *Dep. of Sistemi and Informatica, University of Florence*
"Some tomographical results on matrices under adjacency constraints"

4:05 - 4:35 PM **Stefano Brocchi**, *University of Florence*
"Solving the two color problem: an heuristic algorithm"