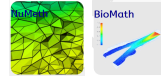




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## MOX Seminar Series

**Michele Piana**

Università di Genova, Dipartimento di Matematica

# Dynamical inverse problems in glucose metabolism of cancer

15 June 2017, 2:00 pm

Aula Consiglio, VII piano - Dipartimento di Matematica, Politecnico di Milano - Edificio 14.

### Abstract:

*Glucose metabolism in cancer can be mapped by using positron emission tomography (PET). however, PET data interpretation requires the use of regularization techniques for both reconstructing functional images of tissue proliferation and detemining the kinetic parameters that explain the effectiveness of information flow between functional compartments. this talk will illustrate a mathematical model for glucose physiology in healthy and cancerous tissues and how such model can be numerically reduced in order to provide quantitative information on glucose pato-physiology*



### Michele Piana:

*Michele Piana is Professor of Numerical Analysis at the Dipartimento di Matematica, Università di Genova, Research Associate at CNR - SPIN and Honorary Research Fellow at the Department of Physics, University of Glasgow. He is Principal Investigator of the 'Methods for Image and Data Analysis (MIDA)' group, which is a joint UNIGE-CNR research lab developing computational techniques for data interpretation in physics and physiology. He is currently vice-Rector for Research and Technology Transfer at the Università di Genova.*