### Università Politecnica delle Marche



Dipartimento di Ingegneria dell'Informazione

## **SEMINAR ANNOUNCEMENT**

# Fundamentals of the Theory and Practice of Mixed Integer Nonlinear Programming

Prof. Claudia D'Ambrosio

Venerdì 14/06/2013, ore 11.00, Biblioteca D.I.I., q.ta 165

### Abstract

In the last decade a renewed scientific community attention has grown on Mixed Integer Nonlinear Programming (MINLP). This class of problem is difficult to attack because of the contemporary presence of nonconvex elements like general nonlinear functions and integrality requirements.

However, different real-world applications can be modeled as MINLP problems. In this talk we review the most used algorithms, methods, the most important classes of MINLP problems, real-world application, and some tools for practically solving MINLPs.

#### Speaker's short Bio

Claudia D'Ambrosio obtained her PhD in Automatic Control and Operations Research in 2009 from University of Bologna. At present she is researcher scientist at CNRS in the LIX, Ecole Polytechnique, France. Her main research interests are in mathematical programming, Mixed-Integer Nonlinear Programming (MINLP), real-world applications, exact and heuristic methods for MINLP (http://www.lix.polytechnique.fr/~dambrosio/).

All interested people, particularly PhD students, are invited to attend the seminar