RESOURCE ALLOCATION IN MOBILE TELECOMMUNICATIONS SYSTEMS, MANUFACTURING AND SERVICES

decision and management methods

GRAPH OPTIMIZATION PROBLEMS

SCHEDULING PROBI

DYNAMICAL ANALYSIS OF NONSMOOTH NONLINEAR CIRCUITS

METHODS FOR PERFORMANCE MEASUREMENT

electrical engineering

BOUNDARY VALUE PROBLEMS FOR ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

NONLINEAR CIRCUITS MODELING NEURAL NETWORKS: COMPLEX DYNAMICS, TRAJECTORY CONVERGENCE AND OPTIMIZATION CAPABILITIES

STABILITY PROBLEMS FOR DIFFERENTIAL INCLUSIONS

SCATTERING AND DIFFRACTION, ANTENNAS AT MICROWAVE AND MILLIMETER WAVES

mathematical analysis

electromagnetism

PHASED ARRAY

ANALYTIC ASPECTS OF CONVEXITY

ATMOSPHERIC POLLUTANTS DIFFUSION

METAMATERIALS AND ARTIFICIAL SURFACES

ENERGY CONVERSION, RENEWABLES, WASTE TREATMENT PROCESSES AND TECHNOLOGIES

RADIO FREQUENCY ID AND MICROWAVE SENSORS

energy and waste treatment

Department of Information Engineering

SENSOR SYSTEM DESIGN

VISUAL DATA AND SENSORS FOR SAFETY, MOBILITY, AND HOMECARE

HW RANDOM NUMBER GENERATORS

VISUAL INFORMATION PROCESSING AND PROTECTION

CELLULAR OFDMA SYSTEMS

DPA-SECURE CRYPTOGRAPHIC CIRCUITS

LOW POWER LOGIC CIRCUIT DESIGN

telecommunications

electronics and measurements

ENVIRONMENTAL REMOTE SENSING

WIRELESS SENSOR NETWORKS

DIGITAL TERRESTRIAL TELEVISION SERVICES

CHEMICAL SENSOR DEVELOPMENT AND CHARACTERIZATION

MULTIMEDIA QOS ON WIRELESS NETWORKS

COMPUTER ARCHITECTURE

MACHINE LEARNING

MOBILE ROBOTICS

AUTOMOTIVE CONTROL

WEB MINING

ICT IN EDUCATION

MOBILE COMPUTING

VISION-BASED ROBOTICS

ENVIRONMENTAL MODELLING

systems and control

computer science and engineering

REMOTE CONTROL FOR DISTANCE LEARNING

PROBLEM SOLVING

INFORMATION SECURITY

HYBRID SYSTEMS

CROSSWORD SOLVING AND GENERATION

HAPTICS VIRTUAL REALITY

MEDICAL APPLICATIONS

PATTERN RECOGNITION

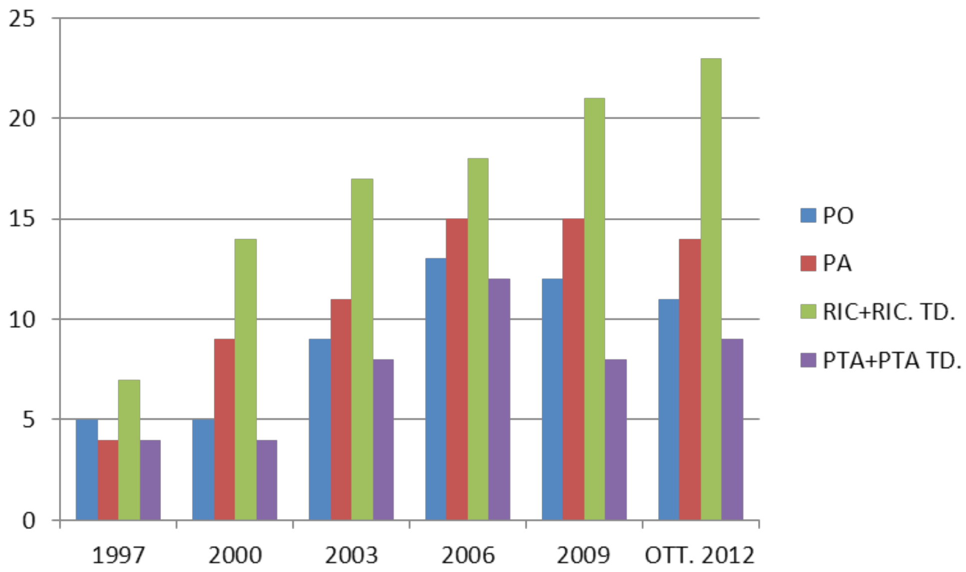
IDENTIFICATION AND ROBUST CONTROL

UNIVERSITA' DI SIENA 1240

Siena, 28 June 2013

RESOURCES (1/3)

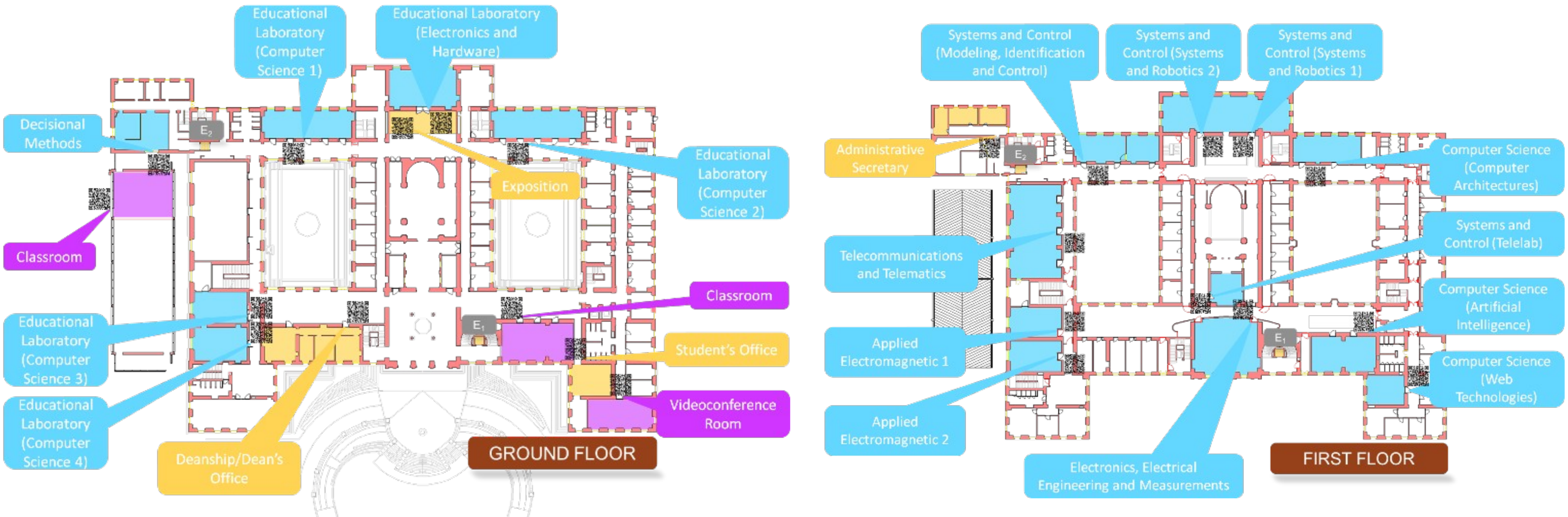
DII Staff



DII Directors

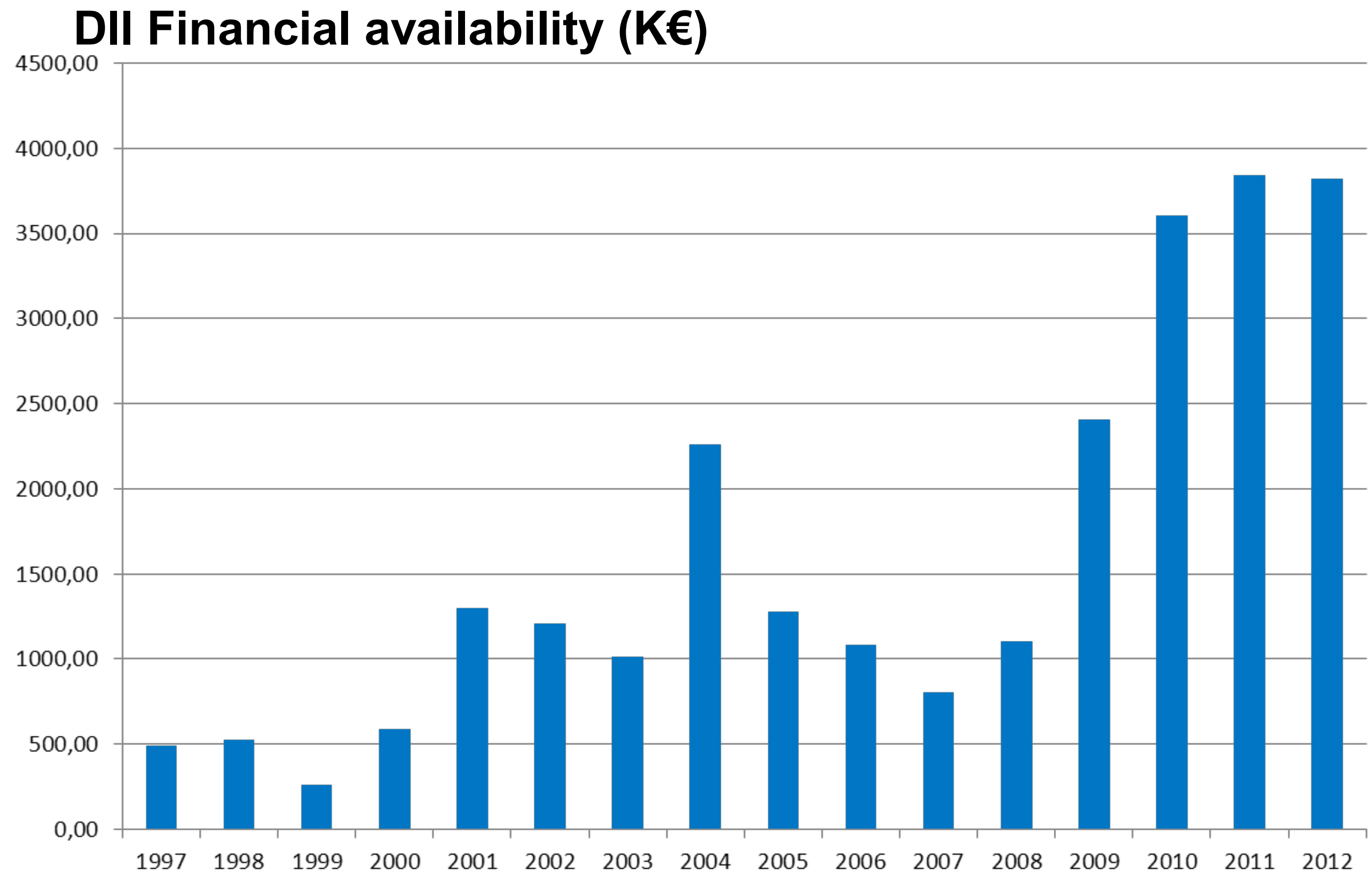
Antonio Vicino	1996 - 1999
Giuliano Benelli	1999 - 2005
Enrico Martinelli	2005 - 2008
Santina Rocchi	2008 - 2012

RESOURCES (2/3)



Laboratories cover a total area of 1500 m^2

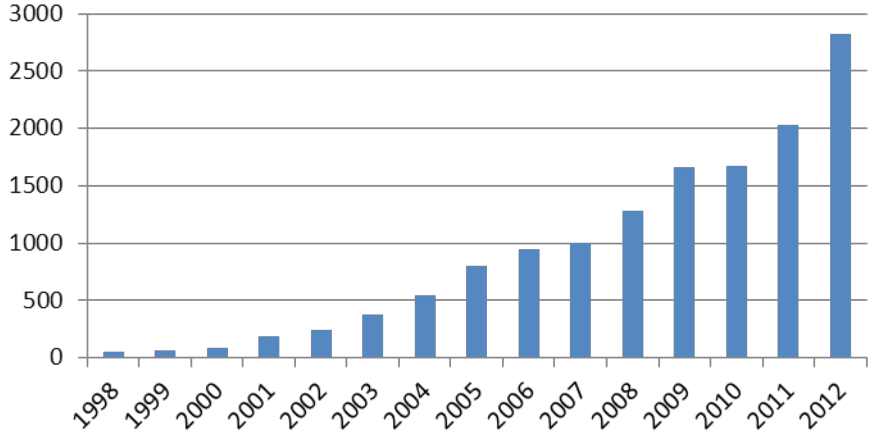
RESOURCES (3/3)



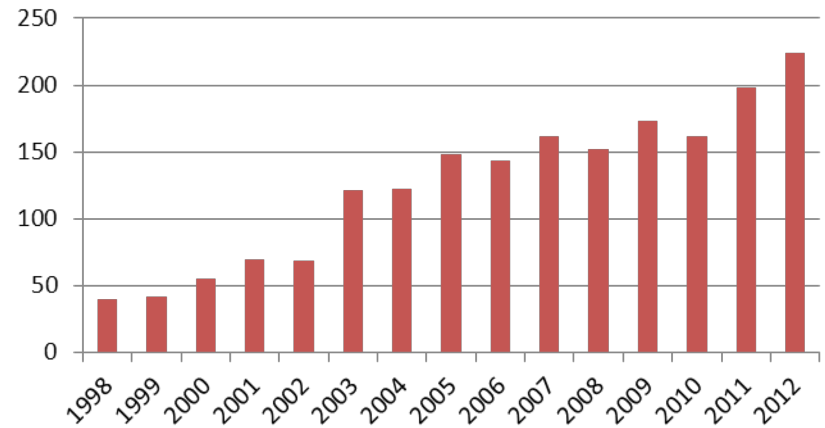
RESEARCH RESULTS (1/2)

Citations (SCOPUS), total number =14868

DII-ING H-index=51



Publ./year (SCOPUS), total number =1



EVALUATION:
The Department, together with the University of Siena Engineering School, ranked 1st among all Italy Engineering Schools in 2006 (CIVR - Italian Committee for the Evaluation of Research) and at the 1st level among all the Departments of the University of Siena in 2006 (VAI - University Evalution Project).

RESEARCH RESULTS (2/2)

Most Important Scientific International Recognitions

Fellowships

n.4 Fellow of the IEEE (Institute of Electrical and Electronics Engineers):

M. Barni, M. Gori, S.Maci, A.Vicino

n.1 Fellow of the ECCAI (Europ. Coordinating Committee for Artificial Intelligence):

M. Gori

n.1 Fellow of the IFAC (International Federation of Automatic Control):

A. Vicino

IEEE Distinguished Lecturers (2009-2012)

M. Alioto, M. Barni, S. Maci

Associate Editors; Editorial Board Members

40 people

TECHNOLOGY TRANSFER RESULTS (1/2)

* More than 20 projects/year in collaboration with public and private companies

* Innovative services developed inside the Department

2006-2013; On-line user interface and management: purchase, travel work authorizations and technical reports . *S.Palmas, A.Paolessi, S. Volpini.*
2010-2013; On-line booking system for common resources *F.Carusi, L. Cacchiani.*
2009-2013; Open Source VoIP telephony system for all users of the Department, with additional services such as: click to dial, conference call, voicemail and fax to email. *A.Andreadis, N.Del Treggia, E.Grieco, F.Nicolelli, S.Palmas, A.Paolessi, S.Rizzuto, R.Tordini.*
2012; QR Code indoor navigation; Department virtual tour . *L.Pancioni, F.Bertocci, F. Nicolelli*
2008-2013; Inventory management system based on RF-ID technology**.** *A.Andreadis, P.Fedele, D.Mazzeschi*

* Ten Start Up and Spin Off Companies, derived from DII ideas and research activities

TECHNOLOGY TRANSFER RESULTS (2/2)

Strategy Scientific Committee:
...
G. Benelli

Technical and Scientific Committee:
...
A.Toccafondi

Coordination Committee:
...
A.Toccafondi

Steering Committee:
...
G. Benelli

POLIS - Città sostenibile

Dit-BeCS

POLITER - ICT e Robotica

ICT e TLC

cartario

mobile ed arredamento

nanotecnologie

meccanica

Tuscany Innovation Poles to which the Department takes part

Technological Districts to which the Department takes part