

HOW TO GET TO PONTECCHIO MARCONI

Villa Griffone and Pontecchio Marconi are located about 15 km south of Bologna and are easily accessible:

- By TAXI: Approximate cost: 25 €.
- By BUS: blue line No. 92, departure from Bologna Bus Station (near the Railway Station) every 30 min. Bus stop "Pontecchio Mausoleo". Cost is 2.80 €.
- Hotel shuttle (please contact the hotel for available options).
- By car: Strada Statale (SS) No. 64 "Porrettana". Highway A1, exit Bologna-Casalecchio or Sasso Marconi.



ACCOMMODATION

The following hotel is recommended due to its proximity to Bologna City Center and Bus Station:

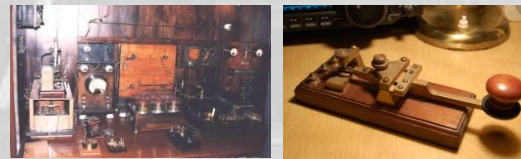
Best Western City Hotel Bologna

Web site: <http://www.cityhotelbologna.it/>

Rate (per person): 35 € (in twin room), 55 € (single room)

MUSEUM VISIT

An exclusive visit to the Museum of Villa Griffone is scheduled on June 8, afternoon. The museum houses accurate working replicas of 19th century scientific equipment and several instruments developed for the transmission of speech and music in the 20th century. The exhibition also features some interesting documents concerning Guglielmo Marconi's education. There is also a scientific program addressed to schools that includes a workshop, offering educational experiments concerning the history of electricity, electromagnetism and telecommunications.



Training School on Energy-aware RF Circuits and Systems Design

6-8 June 2012

Villa Griffone,

University of Bologna Pontecchio Marconi, Bologna, ITALY



FACOLTA DI INGEGNERIA



INTRODUCTION

- The Training School focuses on the design of RF circuits and systems for **energy-efficient** wireless technologies. Basic targets for modern electronic devices are **low-power** consumption and **miniaturization**. Such constraints are fundamental for embedded short-range and body-centric communications applications.
- State-of-the-art methodologies for the design of **entire RF links** by means of circuit, electromagnetic and channel characterization analysis will be presented. A specific emphasis will be put on the combination of all these techniques for the **multi-domain simulation** of overall wireless systems. For this purpose, an in-depth investigation of **RF nonlinear design** will be shown. **New modeling approaches** of SIW structures, microwave oscillators, cognitive radio transceivers and wearable antenna modules will be also presented. **UWB systems** for low-power applications will be addressed as potential applications of optimized linear/nonlinear design techniques.
- It is the aim of the Training School to give the participants a range of lectures covering the fundamental aspects of **linear and nonlinear** RF design of energy-efficient systems for modern wireless applications. The Training School will be beneficial to **students, engineers** and **researchers** who want to learn about the current status and future trends of RF/microwave technologies and low-power systems. The school will allow the participants to **broaden their knowledge** and gain a **global vision** of the design challenges associated with these systems, approaching the topic in an **interdisciplinary manner**.

More information on: www.cost-ic0803.org

LECTURES

Welcome address : Prof. Gabriele Falciasecca, President of "Fondazione Guglielmo Marconi"

Advanced Modeling of Substrate Integrated Waveguide Structures

Prof. Maurizio Bozzi, University of Pavia, Italy

Technology Challenges for Cognitive Radio Transceivers

Prof. Nuno Borges Carvalho, University of Aveiro, Portugal

Circuit-level wireless system design at microwave frequencies.

Part 1: nonlinear analysis techniques

Prof. Vittorio Rizzoli, University of Bologna, Italy

Circuit-level wireless system design at microwave frequencies.

Part 2: nonlinear/electromagnetic co-simulation

Prof. Alessandra Costanzo, University of Bologna, Italy

Short-range positioning systems

Prof. Davide Dardari, University of Bologna, Italy

Deterministic radio channel modeling for MIMO and UWB systems

Prof. Vittorio Degli Esposti, University of Bologna, Italy

Microwave Oscillators

Dr. Apostolos Georgiadis and Dr. Ana Collado, CTTC, Castelldefels, Spain

Antennas and Propagation for Power-Efficient Body-Centric Communications

Prof. Hendrik Rogier, Ghent University, Belgium

Emerging RFID technologies for future ICT applications

Prof. Luca Roselli, University of Perugia, Italy

Future Trends in Zero-Power Systems

Prof. Marco Tartagni, ARCES, University of Bologna, Italy

A Multistandard HF7 UHF-RFID-Tag With Integrated Sensor Interface and Localization Capability

Dr.-Ing. Thomas Ußmüller

LS für Technische Elektronik, Erlangen, Germany

VENUE

"Fondazione Guglielmo Marconi"

Web:

www.fgm.it/

Pontecchio Marconi (Bologna), Italy

REGISTRATION

Register online at:

<http://www.cost-ic0803.org/>

(available from March 30, 2012)

or by email to Prof. Alessandra Costanzo

(alessandra.costanzo@unibo.it)

Registration fee is due onsite.

- Registration fee: 120 €

10 Student and Early Stage Researcher grants available (500 €).

To apply for a grant email: ageorgiadis@cttc.es by April 30, 2012 indicating your interest and attaching your CV.

Upon request, PhD students might be subject to evaluation in order to achieve a certificate to be used for getting credits at own University.

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