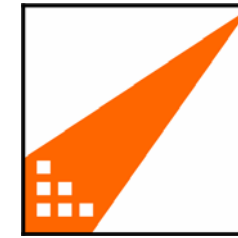


3rd TARGET Summer School

“Linear Power Amplifier Design & Wireless Systems”

Call for participation



T A R G E T
TOP AMPLIFIER RESEARCH GROUPS
IN A EUROPEAN TEAM

24 – 27 July, 2006

Registration: <http://www.target-net.org>

**Escola Politècnica Superior de Castelldefelds (EPSC)
Universitat Politècnica de Catalunya (UPC)**

Contacts:

Local org.: Susana Izquierdo (susana.izquierdo@upc.edu)

Scientific org.: Eduard Bertran (bertran@tsc.upc.edu)

Ada. Canal Olímpic. s/n. 08860 Castelldefelds. Spain <http://epsc.upc.edu>

This Summer School continues the successful TARGET school series with a four-day event offering intensive courses on high level topics on advanced linear power amplifier (PA) design. As a contrast to last TARGET Winter School which focused on semiconductor materials and devices, the attention is paid to circuits and systems. The main objectives of this Summer School are to give a comprehensive overview of the state-of-the-art of linear PA design and to give a thorough understanding of the underlying operating principles in theory and to complement the gained knowledge by talks on implementation issues and by practical sessions with hands-on experience. Attendees will be able to listen to lectures related to advanced linear PA design presented by top experts in the field. The group of presenters is completed by a few advanced Ph.D. students who will mainly be active in the practical sessions. The programme has been designed presuming attendees with expertise at a certain design level (materials, circuits, systems, measurements, models...) but without proficiency at deeper levels, where only a general and basic knowledge is assumed. However, some basic issues on microwave amplifiers design, such as biasing or impedance matching, are assumed to be already known from pre-graduate courses. The Summer School brings together students and lecturers as well as other researchers and professionals who are interested in PA specification, modelling, design and linearisation. Practical sessions will provide courses on device modelling and behavioural modelling and a basic measurement course which intentionally contrasts and complements other instrumentation courses usually offered at relevant microwave conferences.



This call is addressed to partners within the TARGET Network of Excellence as well as to institutions and companies not involved in TARGET. For the latter, the registration fee is 500 € for Ph.D. students and 1000 € for senior participants which includes the Summer School attendance and a CD with the lectures. The fee has to be transferred to the bank account indicated on the registration form.

Deadline for registration (please use the registration form): 15 July 2006.

Deadline for pre-reserved hotel booking (please use the hotel booking form): 14 June 2006 (only TARGET pre-reserved hotels)



PROGRAMME ARRANGEMENT

The first Summer School day starts with two lectures on wireless systems, concentrating on some relevant system level topics, mainly using a qualitative approach, regarding modulations, main types of channel access, and some design issues presented from the project manager point of view. These lectures shall illustrate the influence of some wireless issues to the PA design, as well as the suitability of PA specifications for its operation in multilevel adaptive modulation and different media access methods, imposed by new communication systems. Further, some fundamental aspects of PA design are introduced, as well as some issues on linearity, stability and efficiency.

This talk prepares for the second Summer School day, which morning is focused on PA design improvements, regarding different objectives (linearity, efficiency, ...) and structures. In the afternoon, a practical session on large signal transistor model extraction (ADS-based) will be made.

At the third day participants will gain knowledge on linearisation at system level, with particular emphasis on new digital lineariser alternatives and linearisers suitable for high bandwidth operation, such as feed-forward. As background for digital predistortion lineariser design, in the afternoon a complete tutorial comprising theories and practical issues will be carried out.

And last day attendees will learn more about practical implementation issues at different levels of technology: MMIC design, DSP/FPGA based predistorters, and discrete-component PA design & implementation. A final practical session in the afternoon aiming to offer basic experimental skills (classroom will be a pre-graduate level laboratory) to people usually not working on circuit or system level measurements will conclude this year's TARGET Summer School.

Notice the top professional qualification of the presenters, several of them being on the leading edge of their field of expertise.



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SOME WEB-PAGES:

TARGET NETWORK OF EXCELLENCE: <http://www.target-net.org>

UNIVERSITAT POLITECNICA DE CATALUNYA, (UPC): <http://www.upc.edu>

ESCOLA POLITÈCNICA SUPERIOR DE CASTELLDEFELS (EPSC): <http://epsc.upc.edu>

DEPARTMENT OF SIGNAL THEORY AND COMMUNICATIONS (TSC): <http://www.tsc.upc.edu/>

UPC GROUP IN TARGET: <http://cmc.upc.edu>

CITY OF CASTELLDEFELS: <http://www.castelldefels.com/ingl/home.html>

CITY OF BARCELONA: <http://www.bcn.es/english/ihome.htm> , http://www.tmb.net/ca_ES/turistes/busturistic/busturistic.jsp

HOW TO REACH THE EPSC: in <http://cmc.upc.edu> press "CONTACT"