



Departamento de Ingeniería de
Comunicaciones

CONFERENCIA

Filter design for room auralization

impartida por

Prof. Michael Vorländer

Director of the Institute of Technical Acoustics
RWTH Aachen University

Día: Lunes, 8 de Junio de 2 015

Hora: 12:00

**Lugar: Sala de Grados B
E.T.S. Ingeniería de Telecomunicación
Campus de Teatinos**

Contenido:

Simulations with geometrical acoustics are today well-established tools for acousticians, being widely used for evaluation of sound quality in rooms or urban spaces, mainly due to the development of propagation methods and to the technological advances. In this sense, it is very important to guarantee the validity and quality of simulated data, the filters for the convolution and reproduced sound. In this presentation the fundamentals and a comparison between two acoustic simulators are introduced and discussed, by evaluating the monaural and binaural parameters of the simulated impulse responses when the same input data is used. These results are also compared with very accurate measurements performed in real rooms. The objective is to identify the main deviations with regard to the methods and to the signal processing implemented in each simulation algorithm. Finally, the results of the comparison are presented based on a quantitative investigation of the deviations obtained from the standard acoustic parameters.