



CURSO SOBRE ACÚSTICA

PROGRAMA DEL CURSO

Jueves 7 de marzo. 12:00 Sala Juntas Aulario Sur. 120 minutos

ACOUSTICS - AN OVERVIEW

- Acoustics – what is this? How is sound radiated by source?
- Basic quantities of sound in the 3D field
- The wave equation – typical solutions in 1D and 3D
- The energy in waves – intensity and sound power
- Spectrum analysis of sound signals
 - Narrow band and octave band analysis
- The loudness of sound
 - Definition and usage of the decibel scale
- The human perception of sound
- Room acoustics
 - What is reverberation time?
 - Sound attenuation of walls
- Noise identification with machine learning

Viernes 8 de marzo. 11:00 Aula Magna Aulario Sur. 2. 90 minutos

ACOUSTICS IN VEHICLES

- Acoustics in vehicles Sound sources in vehicles
- The powertrain noise – that's the exciting part
 - How can we analyze this?
- Road noise – always present
 - How can we reduce this?
- Windnoise – disturbance at high speed
 - Techniques in the windtunnel
- Special effects
 - Diesel knocking and electric vehicles
- Acoustic relevant parts
 - Mufflers
 - Interior
 - Chassis
 - body

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IDIOMA: Inglés.