

# Waves Acoustics and Music



Lecturers: Prof. I.Masina (Unife) (coordinator), Dr. D.Stanzial (CNR-IMM Bologna), Dr. G.Lo Presti (CERN), Prof. G.Rispoli (UniFe), Dr. C.Visentin (UniFe)

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Duration: 15 hours (5 cfu)

## LECTURES CALENDAR

- 1) 17/03, 14.30-16.30, online on the course classroom (code 7lf7hoe)  
Prof. I.Masina: *Introduction to the general theory of mechanical waves, in particular sound waves*
- 2) 24/03, 14.30-16.30, aula F6 del Mammut  
Prof. G.Rispoli: *The hearing system, from the point of view of biophysics*
- 3) 31/03, 14.30-17.00, aula C412 Polo Scientifico Tecnologico + Camera Anecoica  
Dr. C.Visentin: *Introduction to the engineering of ambient acoustics*
- 4) 14/04, 14.30-17.00, aula C412 Polo Scientifico Tecnologico  
Dr. G.Lo Presti: *Psychoacoustics with Python: auditory demonstration about harmonics, timbre, beatings, critical bandwidth, etc*
- 5) 21/04, 14.30-17.30, aula C412 Polo Scientifico Tecnologico  
Prof. I.Masina: *Physical foundations of consonance and dissonance; historical development of Western musical scales, from Pythagoras to microtonal temperaments; Tonnetz representations*
- 6) 28/04, 14.30-17.30, aula C412 Polo Scientifico Tecnologico + Laboratorio Acustica  
Prof. D.Stanzial: *Sound waves and their energetics. Visit to the Acoustic Laboratory (CNR-IMM)*