

Directivity control

Course information

ECTS: 2	Common with the master in acoustics	Course code:
Lecture: 13h	Tutorial classes: none	Practical work: 8h

Course coordinator : Manuel Melon.

External teachers coming from [R&D Team](#).

Course Description

Objective

The aim of this course is to know the different acoustic loads that enable the control of the radiation efficiency and directivity pattern of transducers.

Prerequisite

Course : [Transducers Basics](#), [Acoustics I](#), [Acoustics II A](#)

Contents

- * Radiation of simple structures (piston, monopoles, dipoles and quadrupoles, cardioid loudspeaker)
- * Coupling between a loudspeaker system and a room
- * Radiation of loudspeaker arrays, principle of microphone arrays
- * Effects of horns, acoustic lens on loudspeaker radiation
- * Directivity of arrays and horns

Examination duration

2 hours

Examination type

Written examination