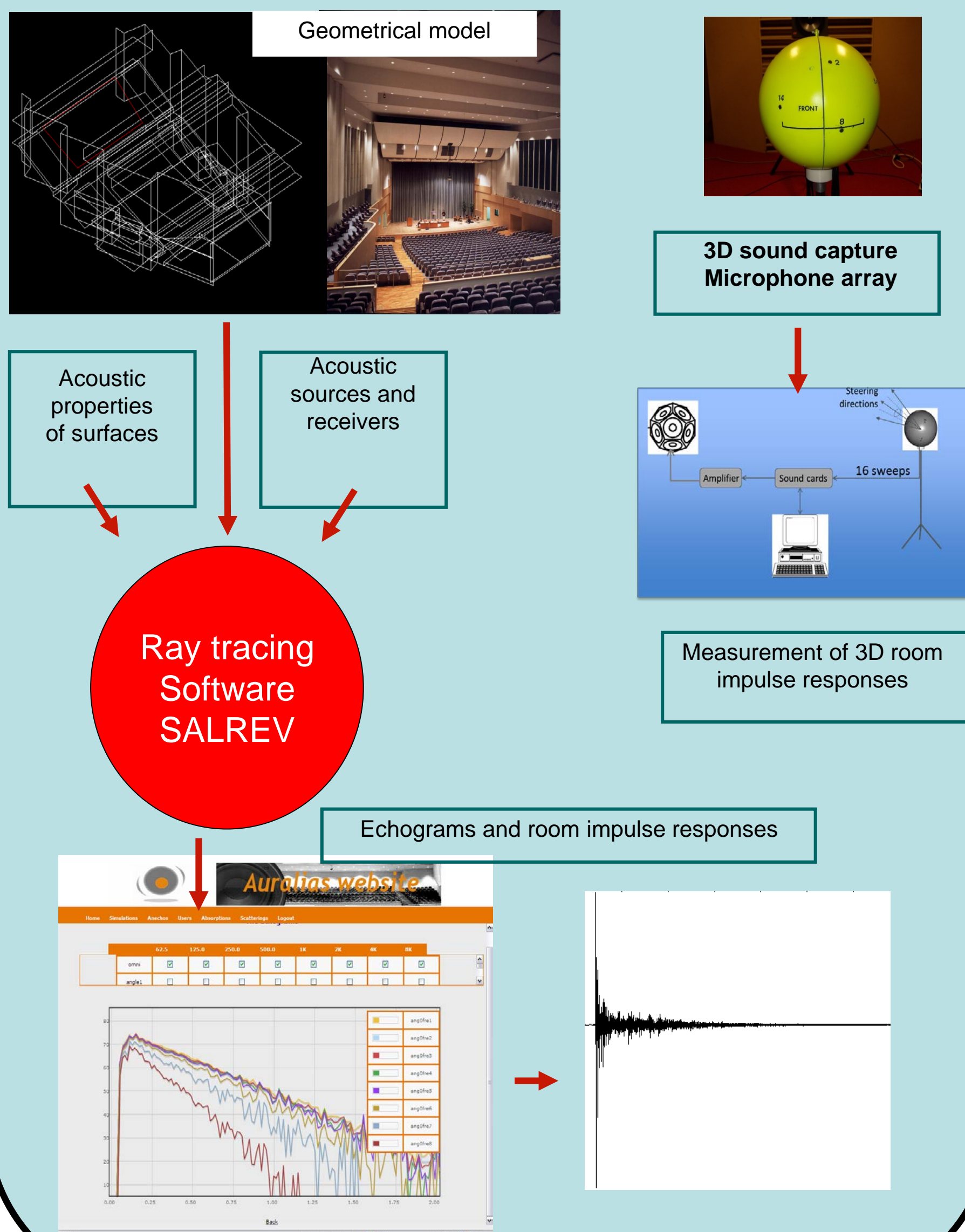
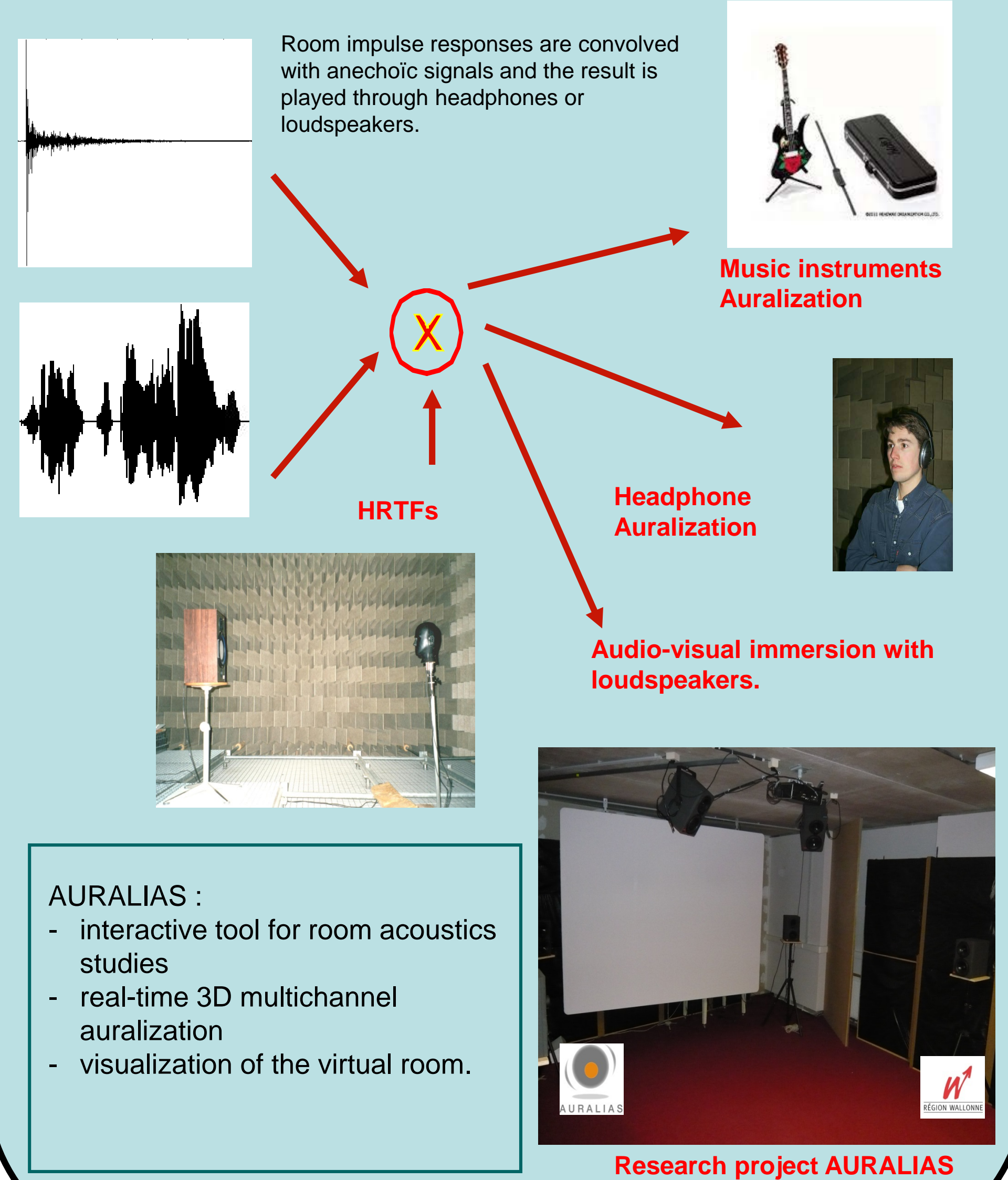


Research in Room Acoustics



Research in auralization, virtual acoustics

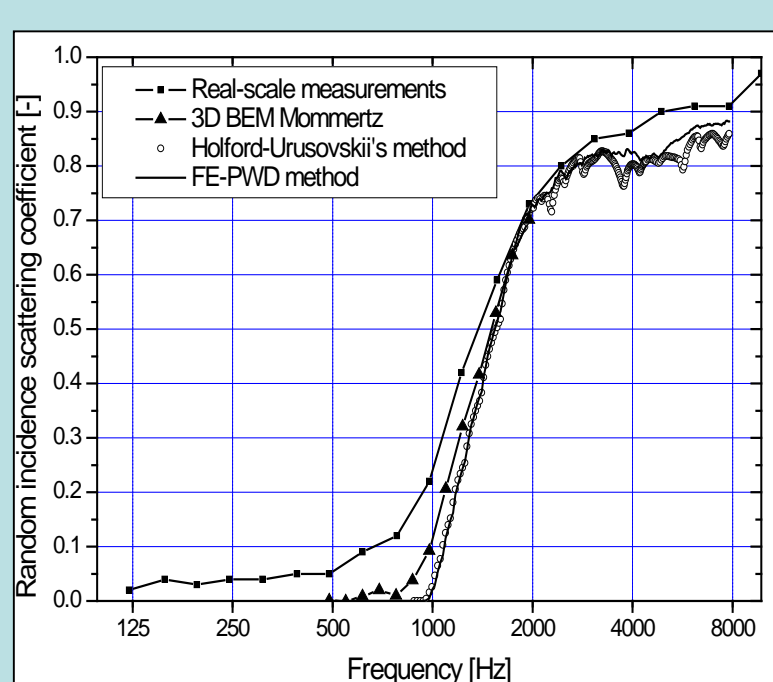


Research in sound scattering

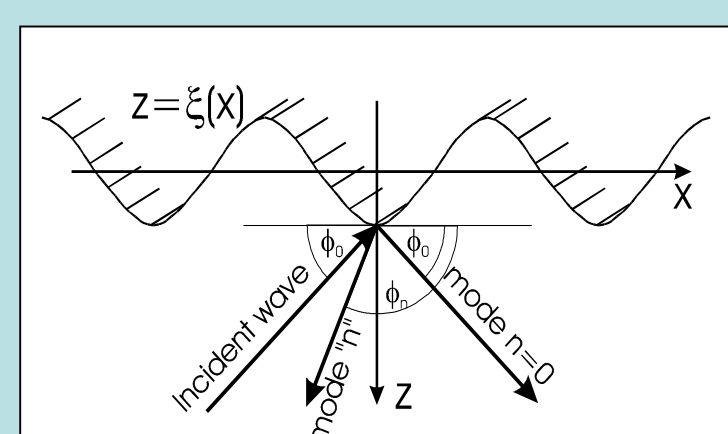


Sound diffusers are surfaces with an irregular profile, designed to create diffuse reflections in rooms and concert halls.

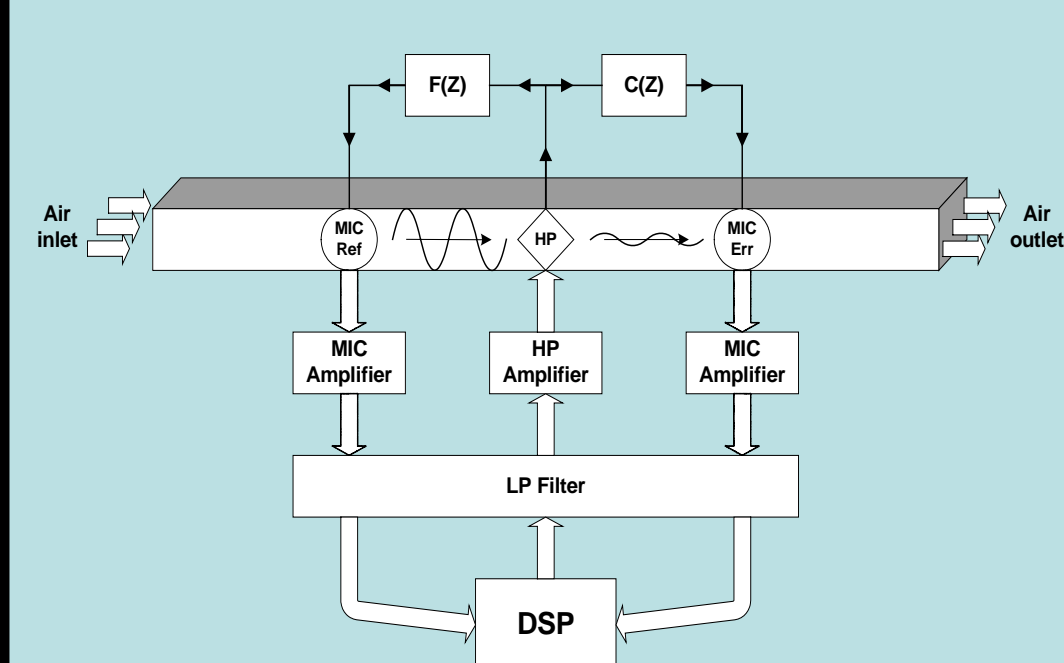
Measurements of the scattering coefficients of diffusers have been realised in our reverberant chamber with the « turntable » method (ISO 17497).



Models are developed to characterize sound diffusing surfaces. These models are compared with measured results.



Research in Active Noise Control



Feed-forward active controller used to generate the inverse of an incoming annoying sound wave.



Present challenges are in multichannel ANC

An **active ventilation duct** was designed during the project ISACBAT. The application was the sound insulation of houses against airport noise emissions.



This ventilation duct is inserted in the masonry with the air outlet apparent on the figure. Anti-noise loudspeakers are on both side of the duct (left figure), the error microphone on the top and the sensing microphone at the bottom.

