











# WHETHER THEY ARE TREATS FOR THE EARS OR NOISE COWBOYS, SOUNDS ARE UNDENIABLY THERE TO BE HEARD. UNLESS...

Any impact creates vibrations in the air that translates into sounds. The impact of the wind on leaves, the air flowing from our lungs on our vocal cords, a door closing, the shuffle of ants moving, the electronic impulses of a bell... Sound waves are everywhere!



A TRUE IMMERSIVE EXPERIMENT. THE EXHIBITION WILL MAKE YOU "HEAR" SOUNDS WITH... YOUR OTHER SENSES!

SEE THEM, through high speed cameras and measuring devices;

TOUCH THEM, by playing with fun music instruments and specialized acoustic materials;

FEEL THEM, thanks to sound quality evaluations, a branch of psychoacoustics;

Finally, HEAR THEM DIFFERENTLY, through music instruments and sound tracks, with your new "sound check" knowledge!

The exhibition comprises four distinct zones. The three first zones answer each of these questions: *Does silence really exist? Do we all perceive the same sounds? Can you see sound?* The answers will be given through more than 20 interactive games and immersive experiments. The fourth zone is a sound experiment with a cinematographic sound station.









### The NATURE of sound

Sounds can be powerful or almost inaudible, high-pitched or deep, simple or complex. For a musician, they are mathematical and should be produced with accuracy. For an acoustic engineer, they travel as waves and can be measured. It's through many fun experiments that you will be invited to describe some sounds you hear, including your own voice!

#### The TRAVEL of sound

The speed of sound varies according to the environment or matter in which it travels. Come and test different environments to see their influence on sound: an anechoic chamber (without reverberation) and a very reflective space. You will discover some techniques used to reduce noise propagation or improve a room's acoustic characteristics.

#### The RECEPTION of sound

Sounds enter the ear's auditory canal and make the eardrum vibrate. Be ready to play the role of each part of the ear and compare your hearing to that of a few animals. Then, learn about auditory health and initiate yourself to psychoacoustics. If you want to go further, take part in a real research project by giving your appreciation of two sounds: one for cell phones and the other for recreational vehicles.



**PRODUCTION** 



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## **INFORMATION**

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