

Mr Serge Charron

ACOUSTIC ENGINEER – CEO

Miss Kallia Charron

MARKETING & DESIGN

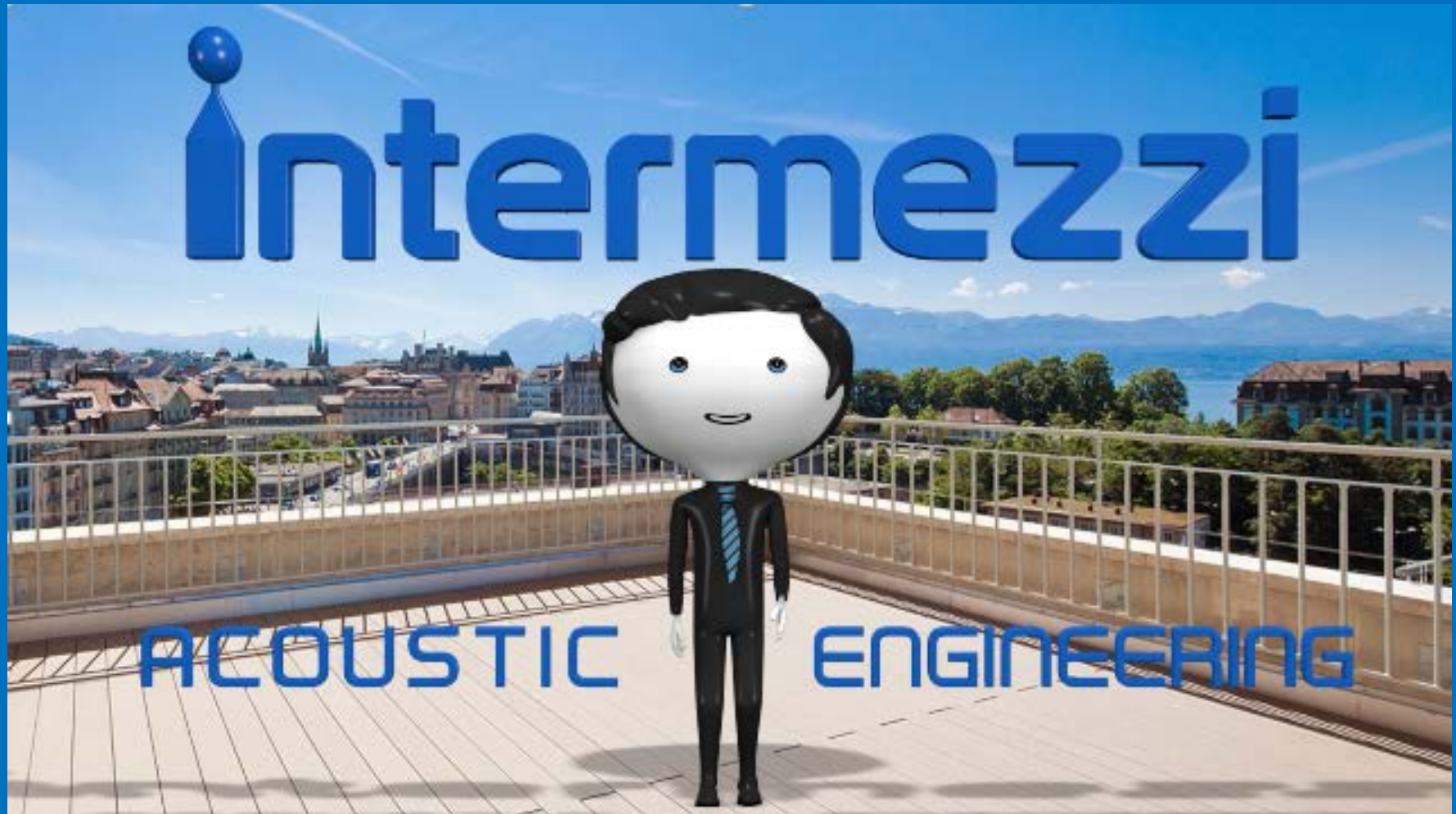
**24, rue de l'Arcade
75008 Paris**

**Phone : 33 (0)6 32 60 36 37
Email : acoustique@intermezzi.fr**

COMSOL
CONFERENCE
2018 LAUSANNE

Acoustic modeling of a Minute Repeater

INTERMEZZI
ACOUSTIC ENGINEERING



Acoustic modeling of a Minute Repeater

GOALS

Improve the Sound

Define Specifications

Study few Materials

Build Web Application

1st RECALIBRATE

Reunite **two worlds**
Essential for a **good begin**

METHODOLOGY



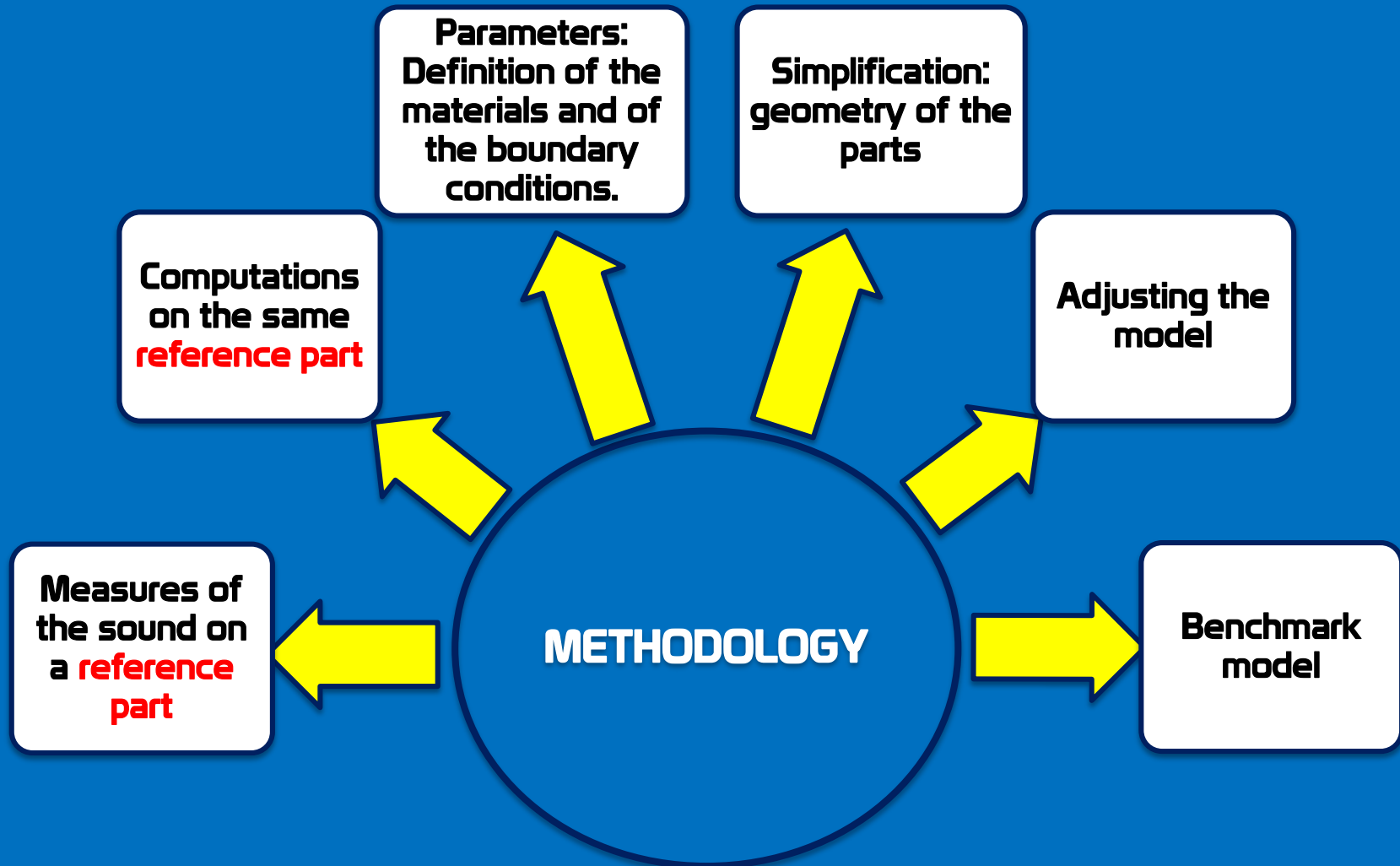
Comparisons
trials- computations

AERIAL ANALYSIS

Frequencies et sound levels

SOLID ANALYSIS

Vibrations et damp of eigen
frequencies

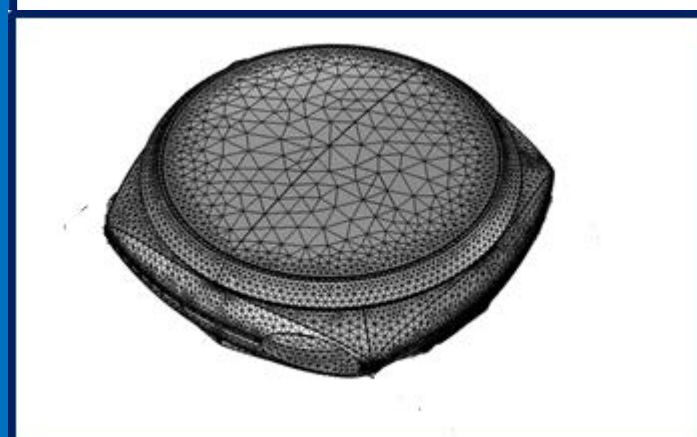
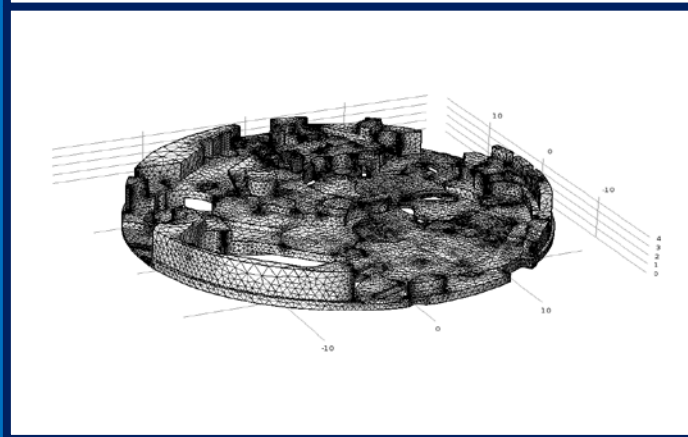
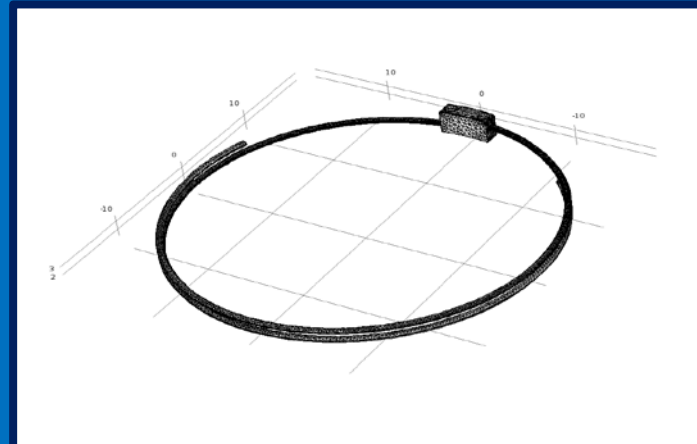
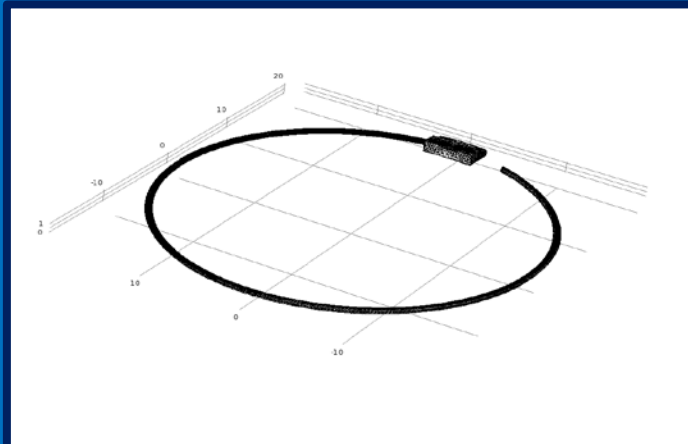


MODELS

650 parts

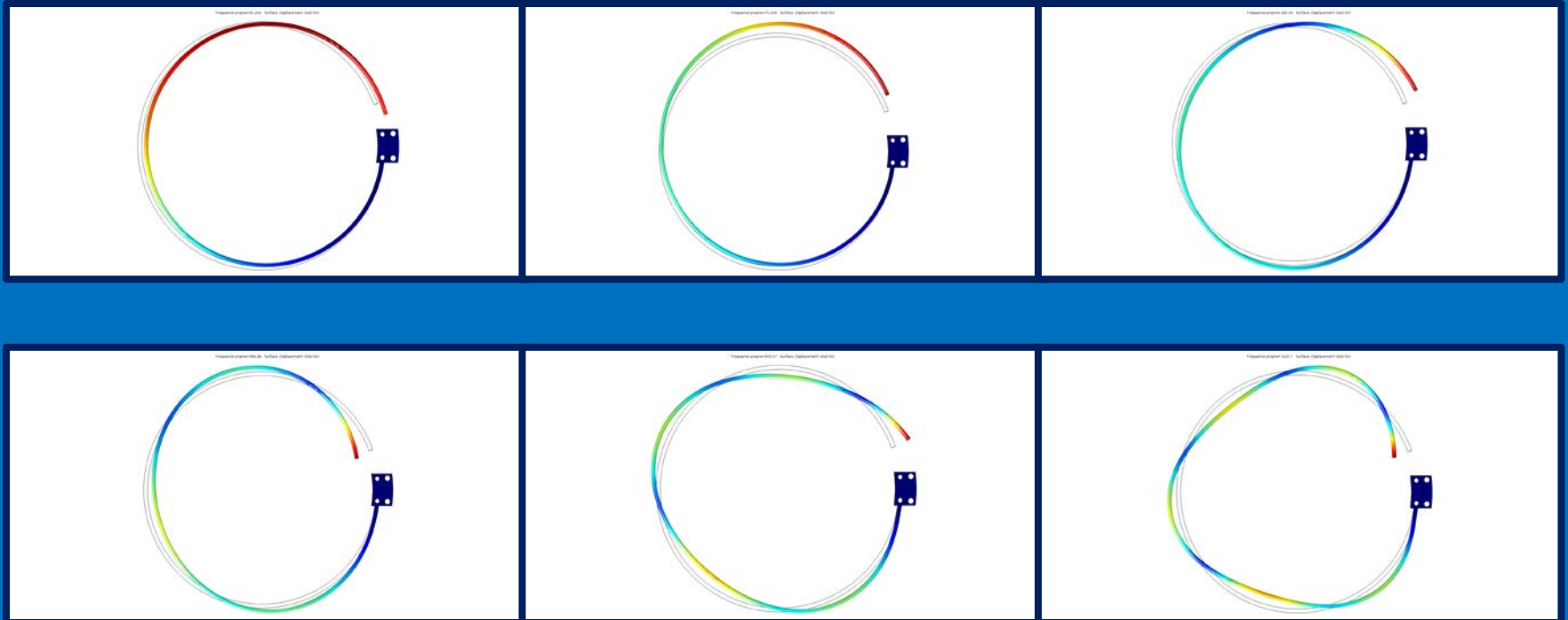


MESH



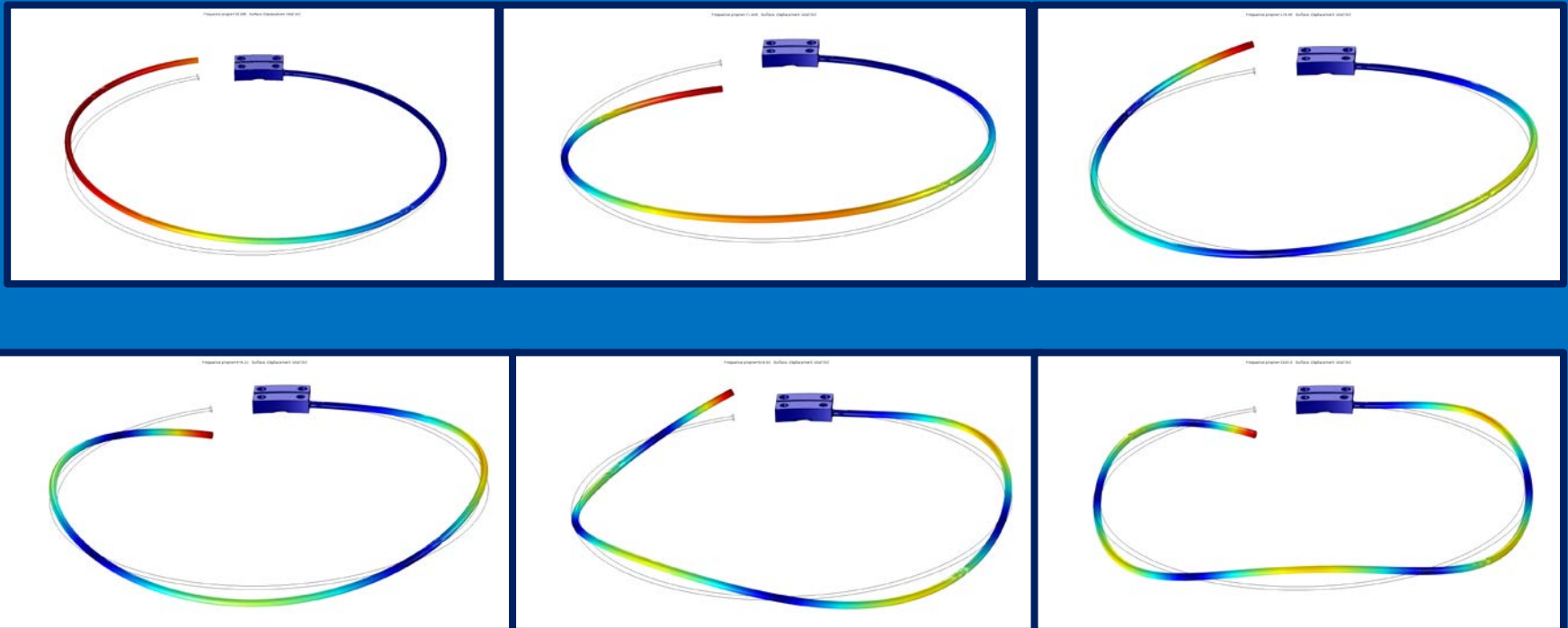
GONGS

Ring modes

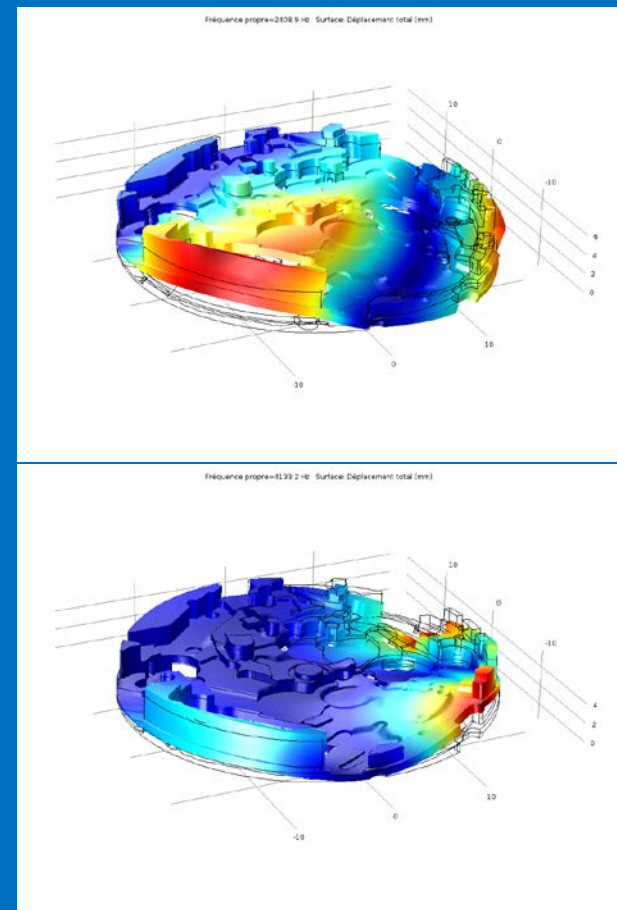
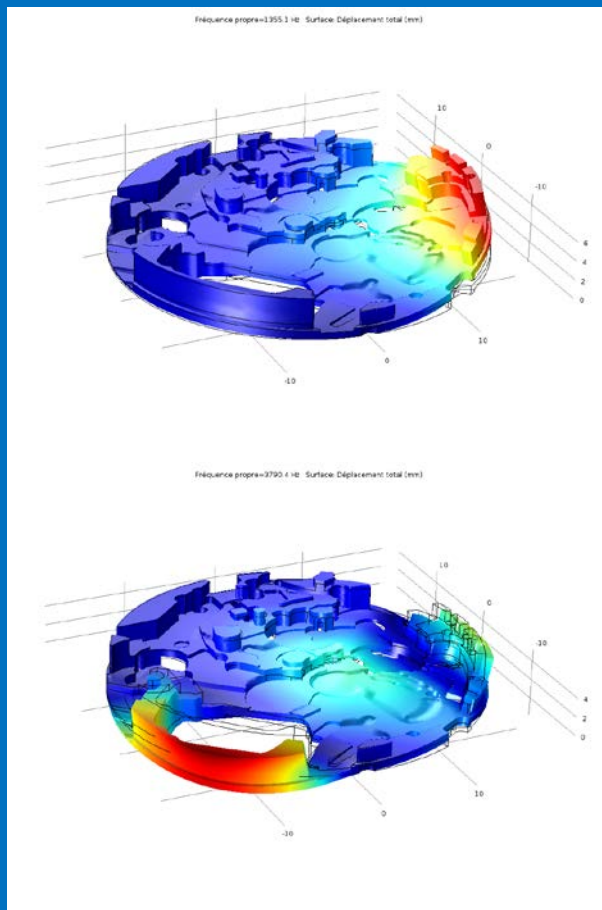


GONGS

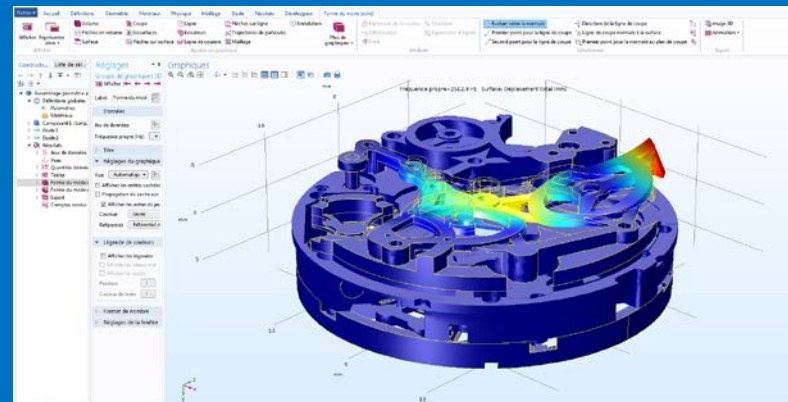
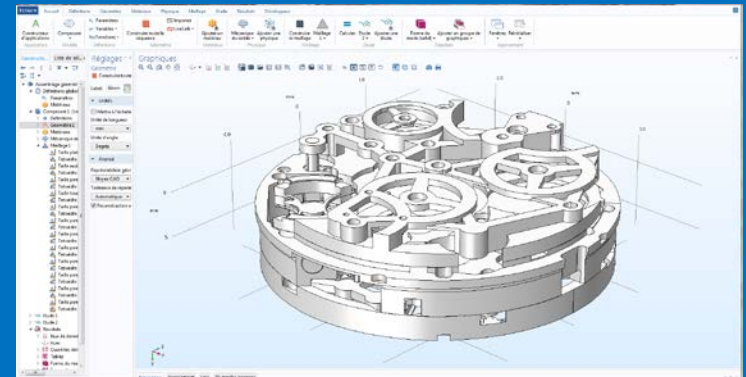
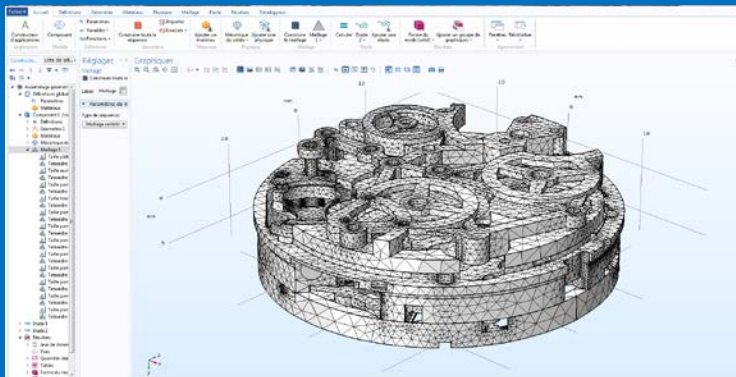
Bending modes



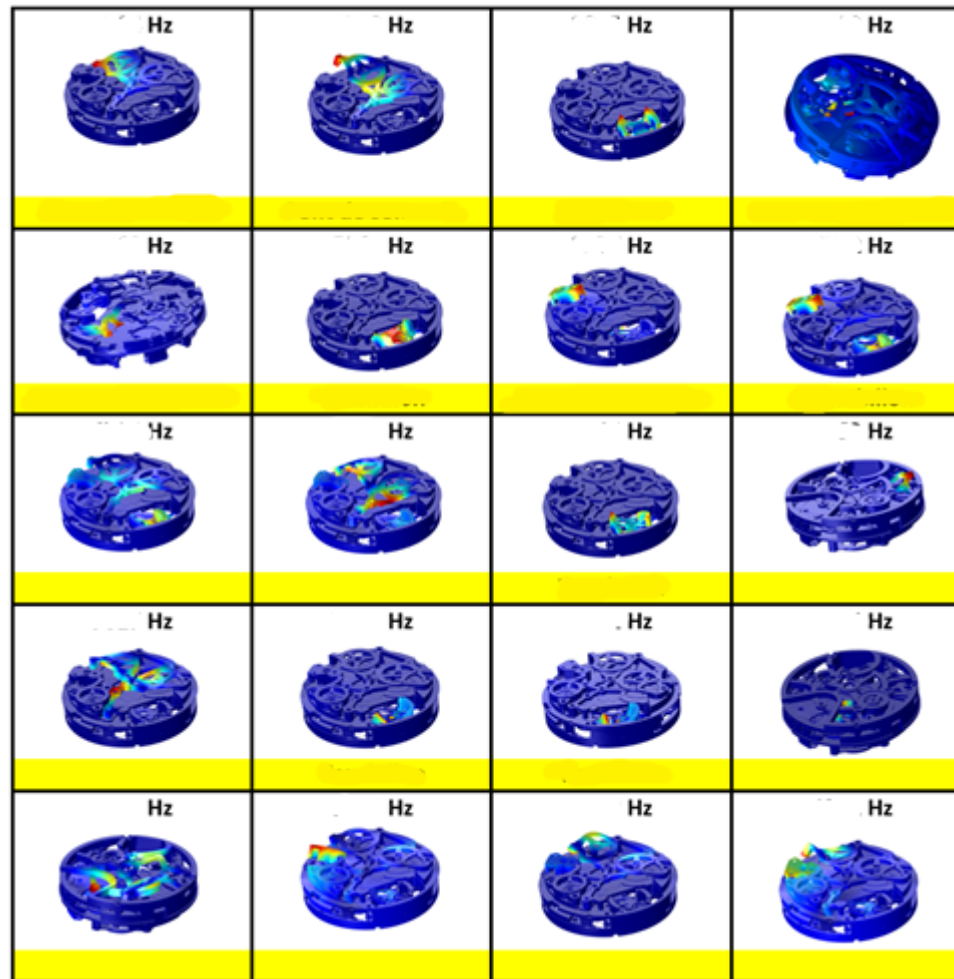
The bottom plate



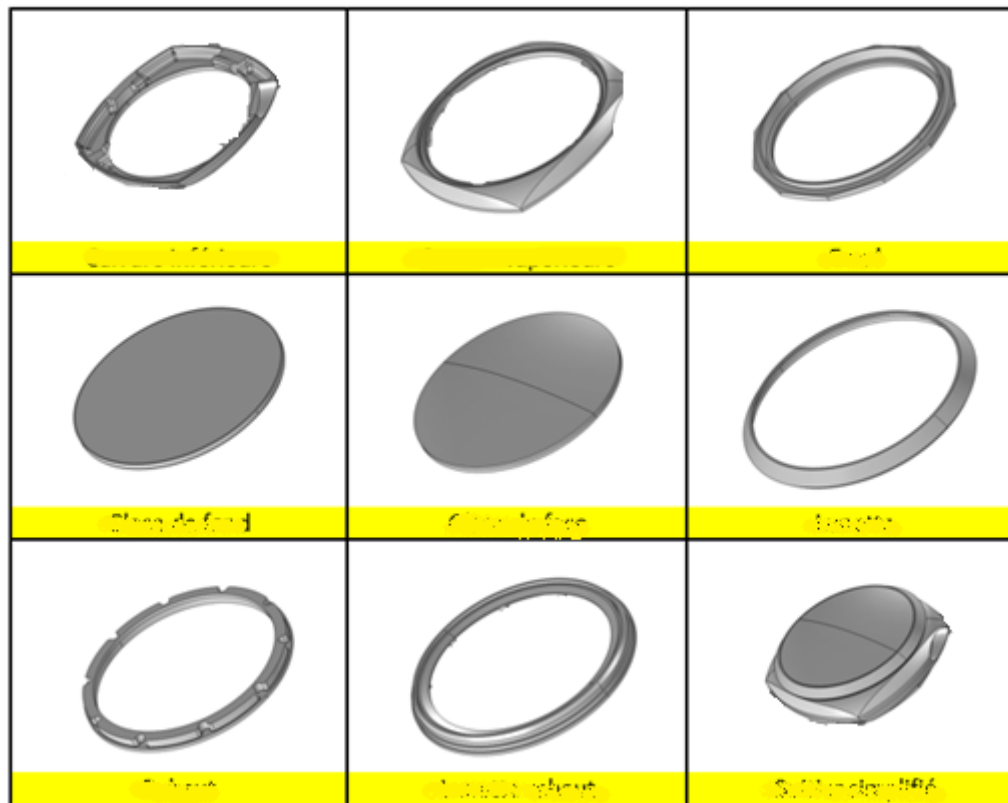
Assembly of those pieces

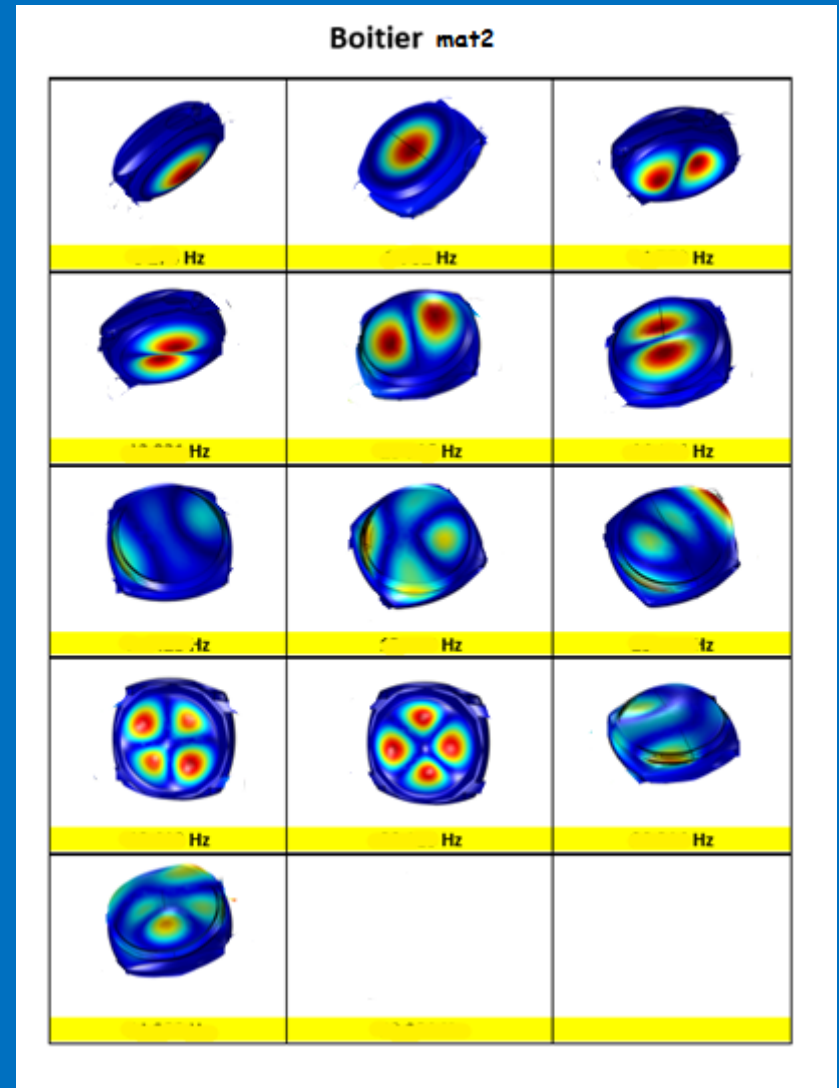
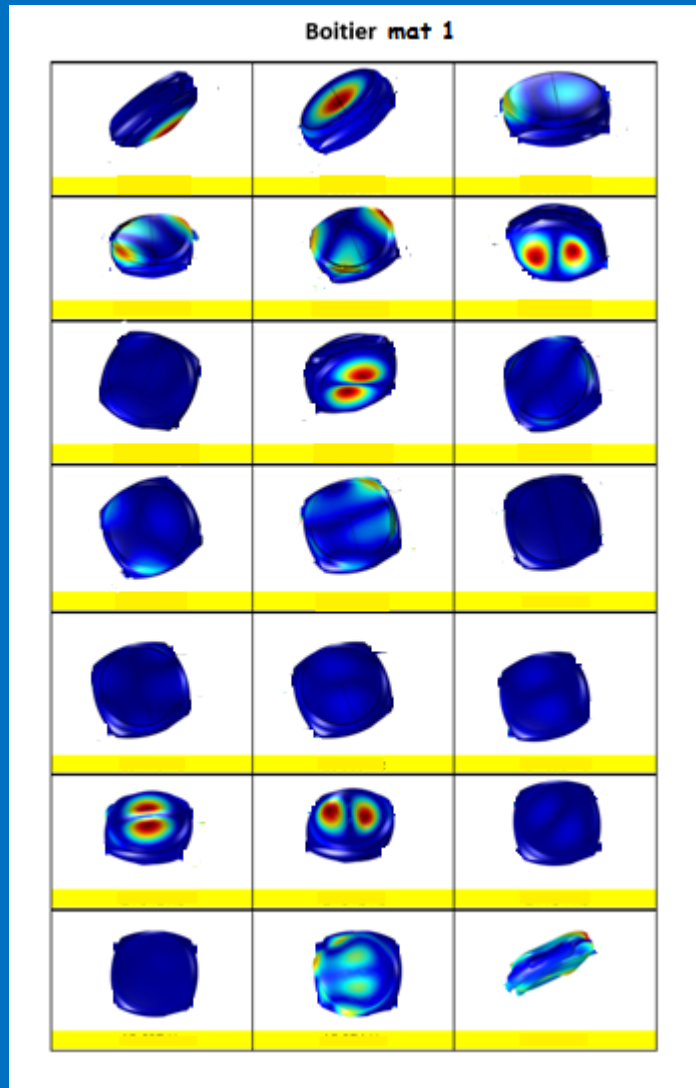


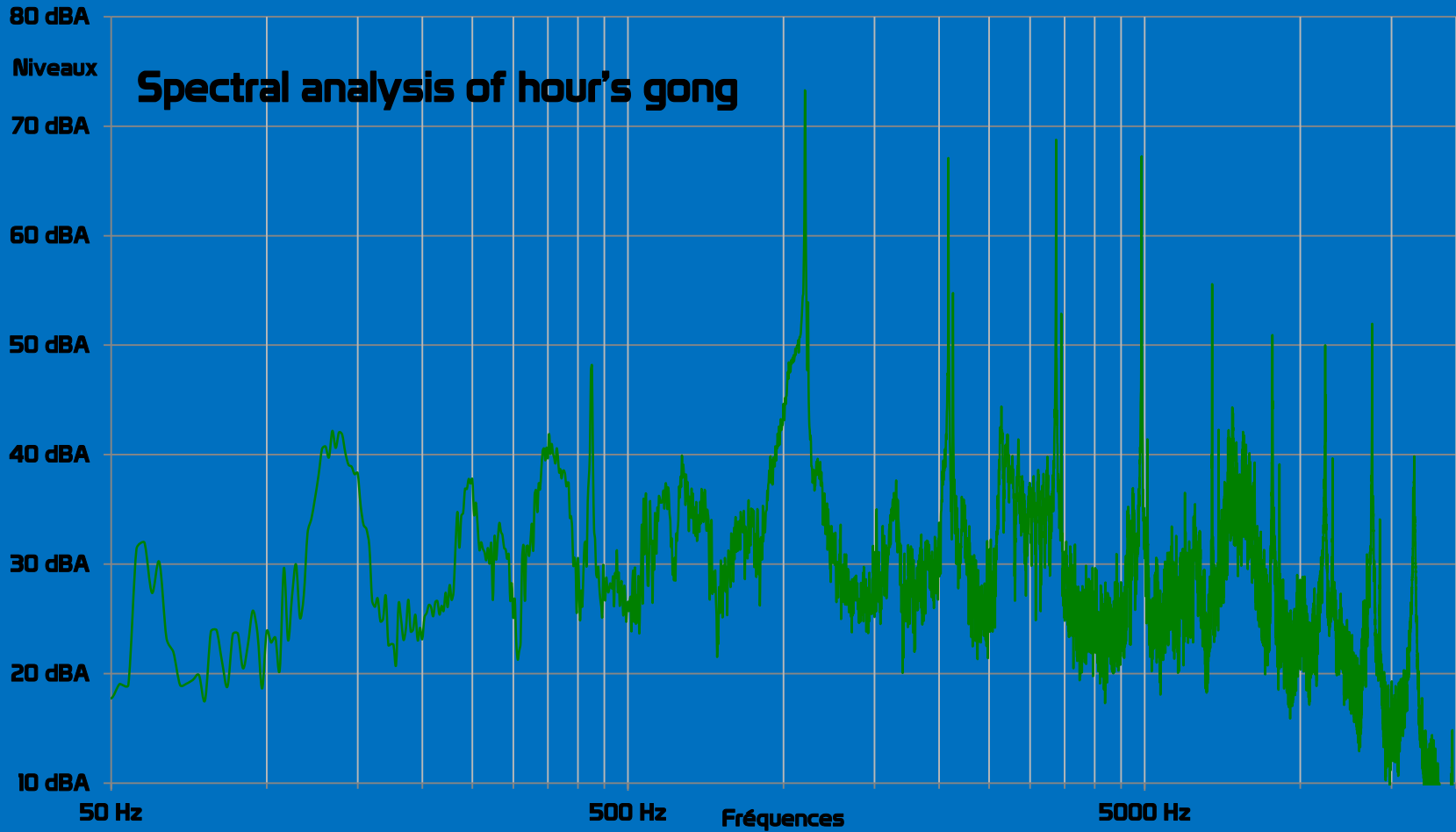
20 premiers modes propres de la platine habillée simplifiée

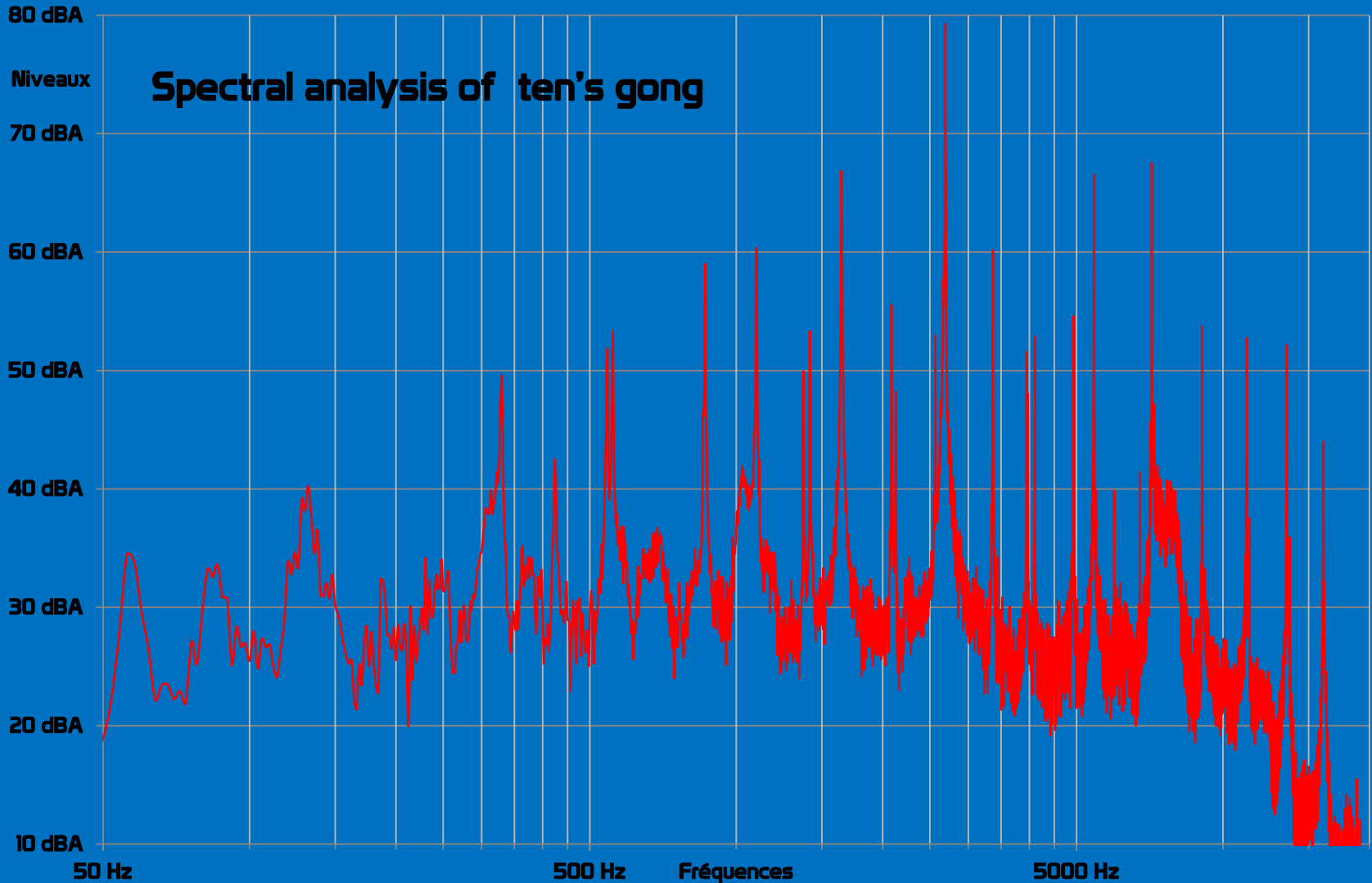


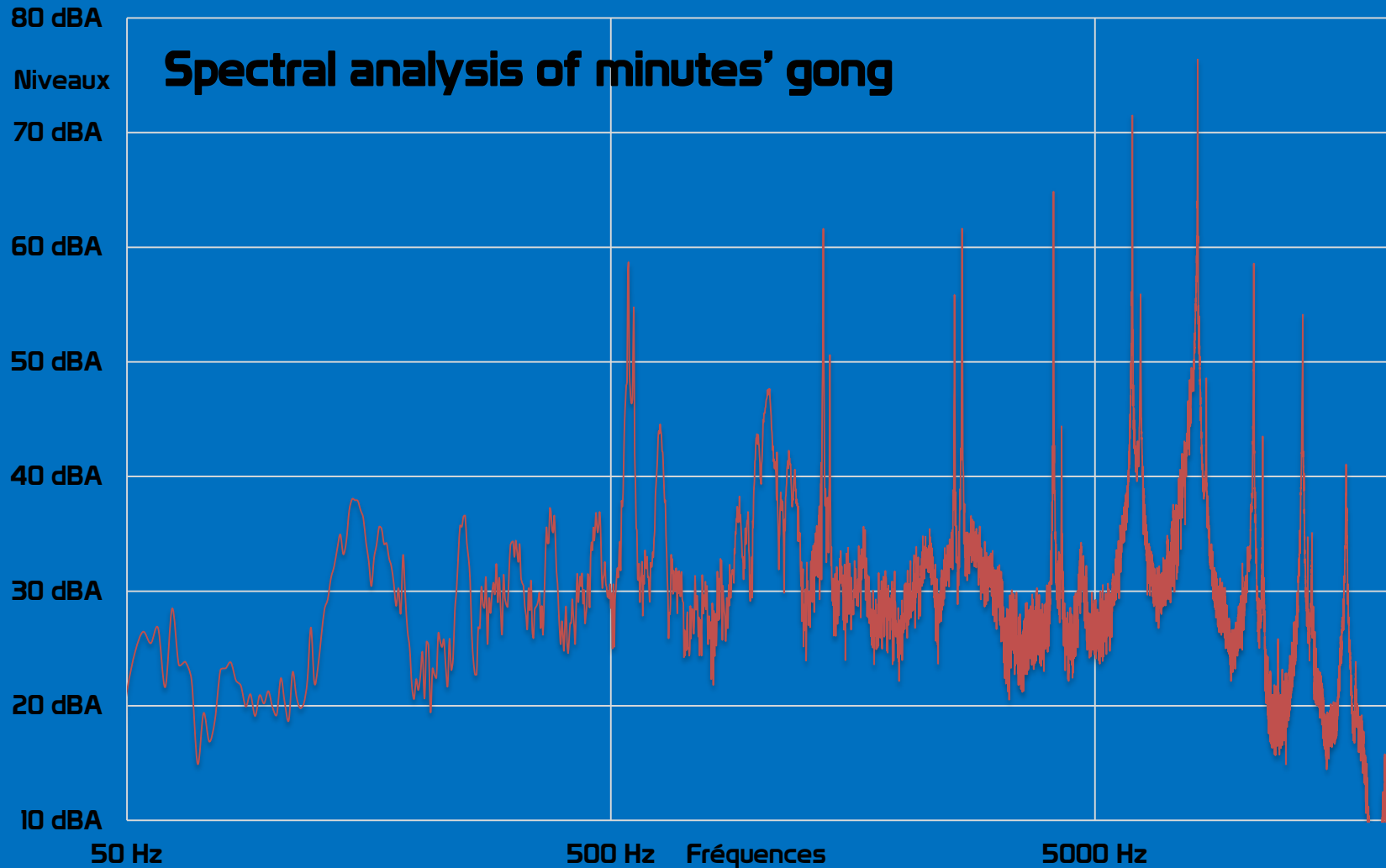
8 pièces du boîtier simplifié



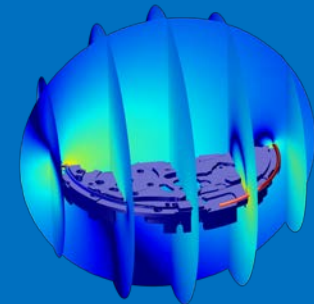
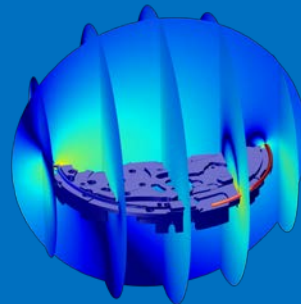
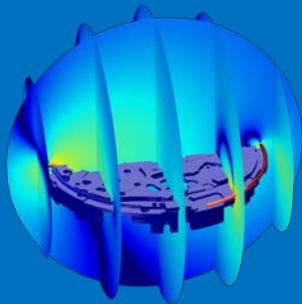
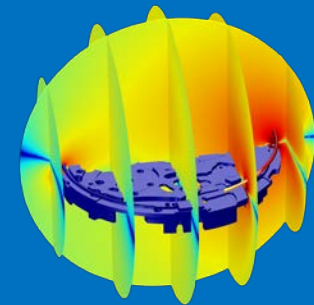
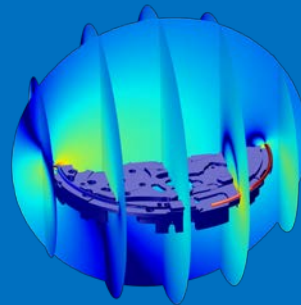
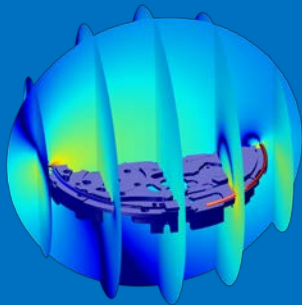




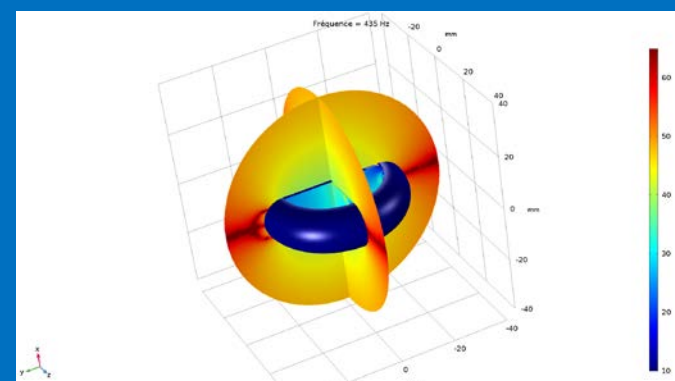
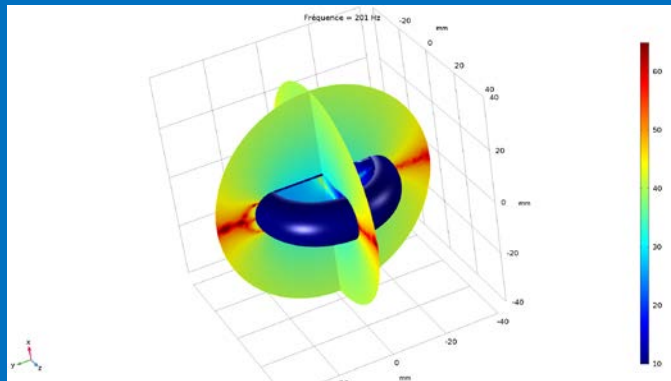
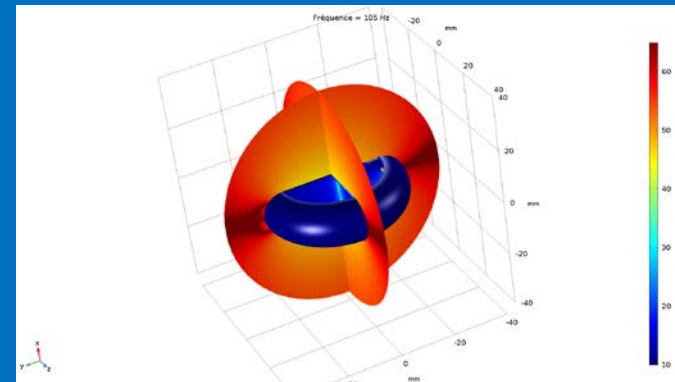
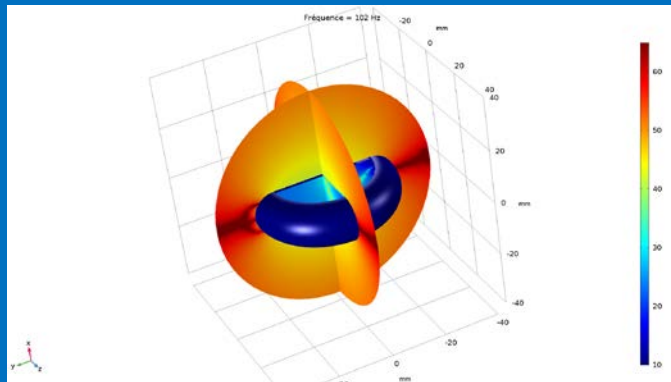




Sound propagation of gong and simplify plate



Sound propagation of gong and the case



Web application for the watchmaker

Données

Angle de coupe du timbre:	340	°
Diamètre du timbre:	0.60	mm
Longueur du timbre:	4.0	mm
Largeur du timbre:	2.5	mm
Nombre souhaité de fréquences propres:	10	
Modification de la longueur de la base du timbre:	10.0	°
Angle de coupe de la base du timbre:	120.0	°
Hauteur de coupe de la base du timbre:	0.565	mm
Modification de la longueur du bras de la base:	30	°
Hauteur de coupe du bras de la base:	0.07	mm

Géométrie **Calculer**

Afficher Maillage **Afficher**

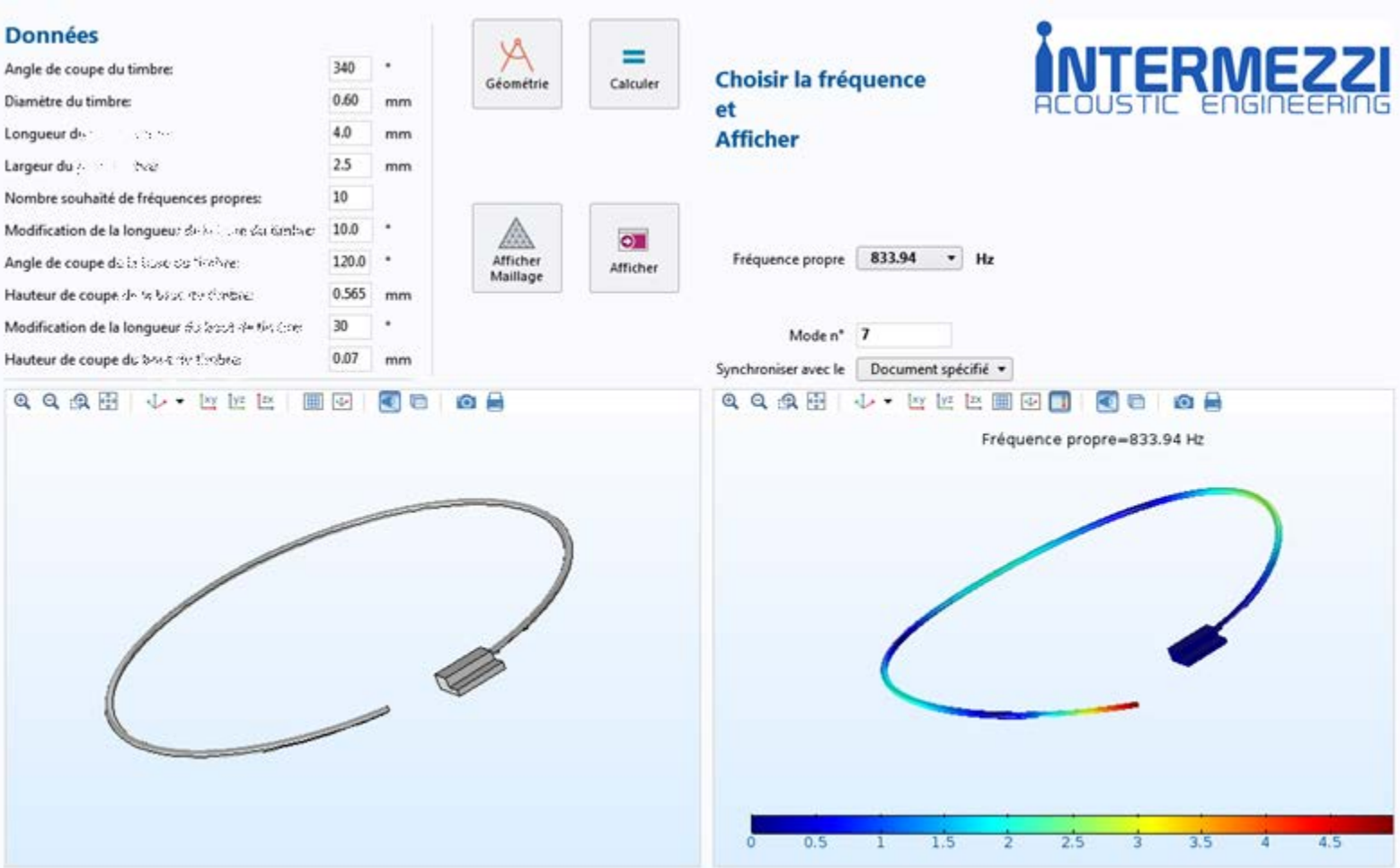
Choisir la fréquence et Afficher

Fréquence propre: Hz

Mode n°:

Synchroniser avec le:

INTERMEZZI
ACOUSTIC ENGINEERING



I thank you very much for the quality of our exchange and for listening!



intermezzi
ACOUSTIC ENGINEERING

The logo for Intermezzi Acoustic Engineering is displayed in a large, blue, sans-serif font. The word 'intermezzi' is in a bold, lowercase font, while 'ACOUSTIC ENGINEERING' is in a smaller, all-caps font below it. The background of the logo is a photograph of the Eiffel Tower in Paris, France, under a clear blue sky with some light clouds. The tower is centered in the background, and the foreground shows a paved area with some trees and a few people walking.

Mr Serge Charron

Phone : 33 (0)6 32 60 36 37

Email : acoustique@intermezzi.fr