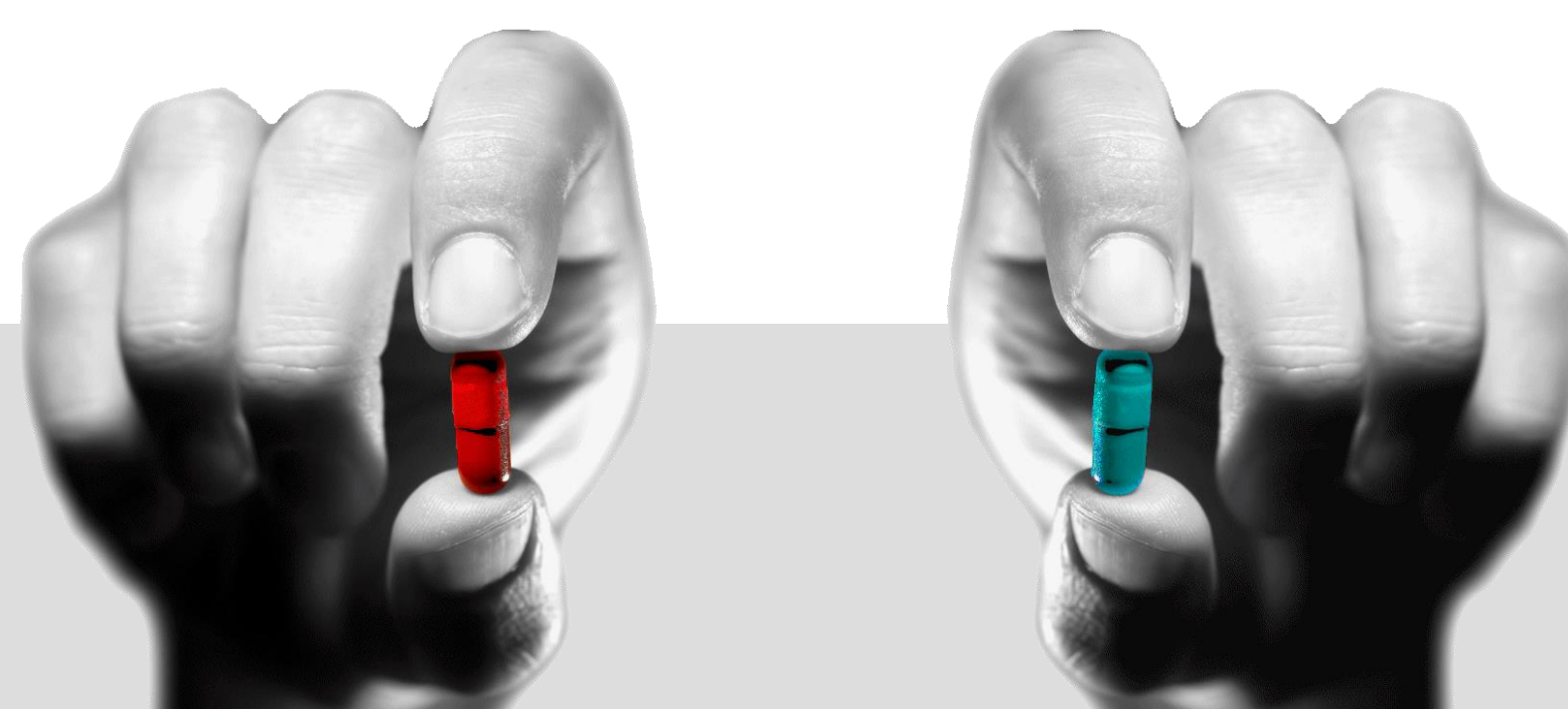


# Simulation of Horn Driver Response by Direct Combination of Compression Driver Frequency Response and Horn FEA

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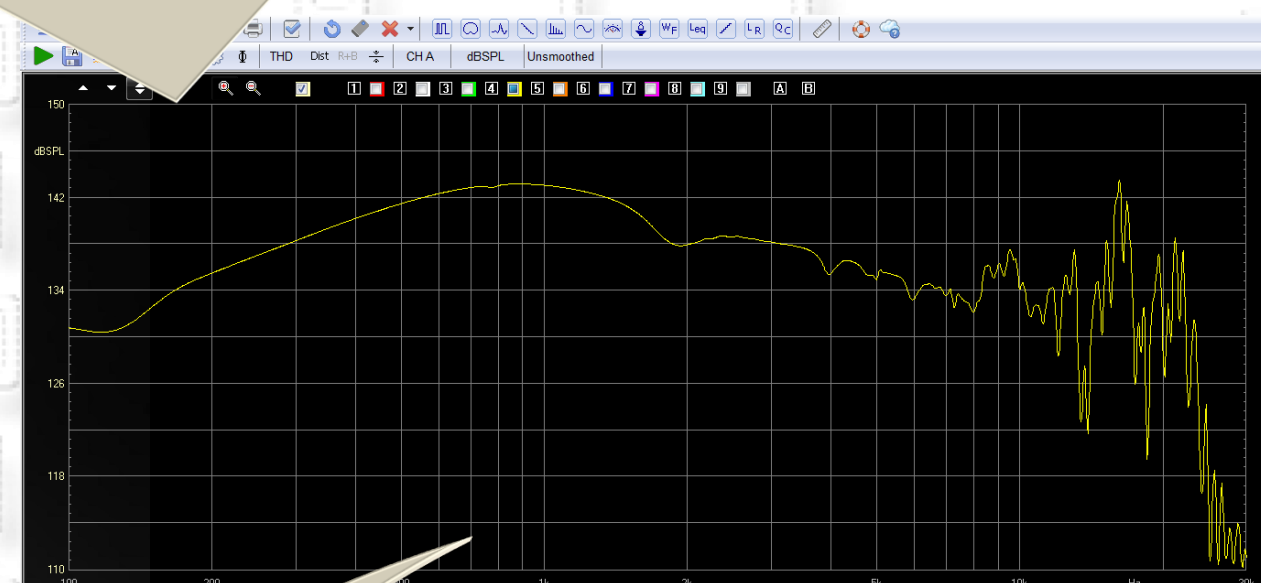
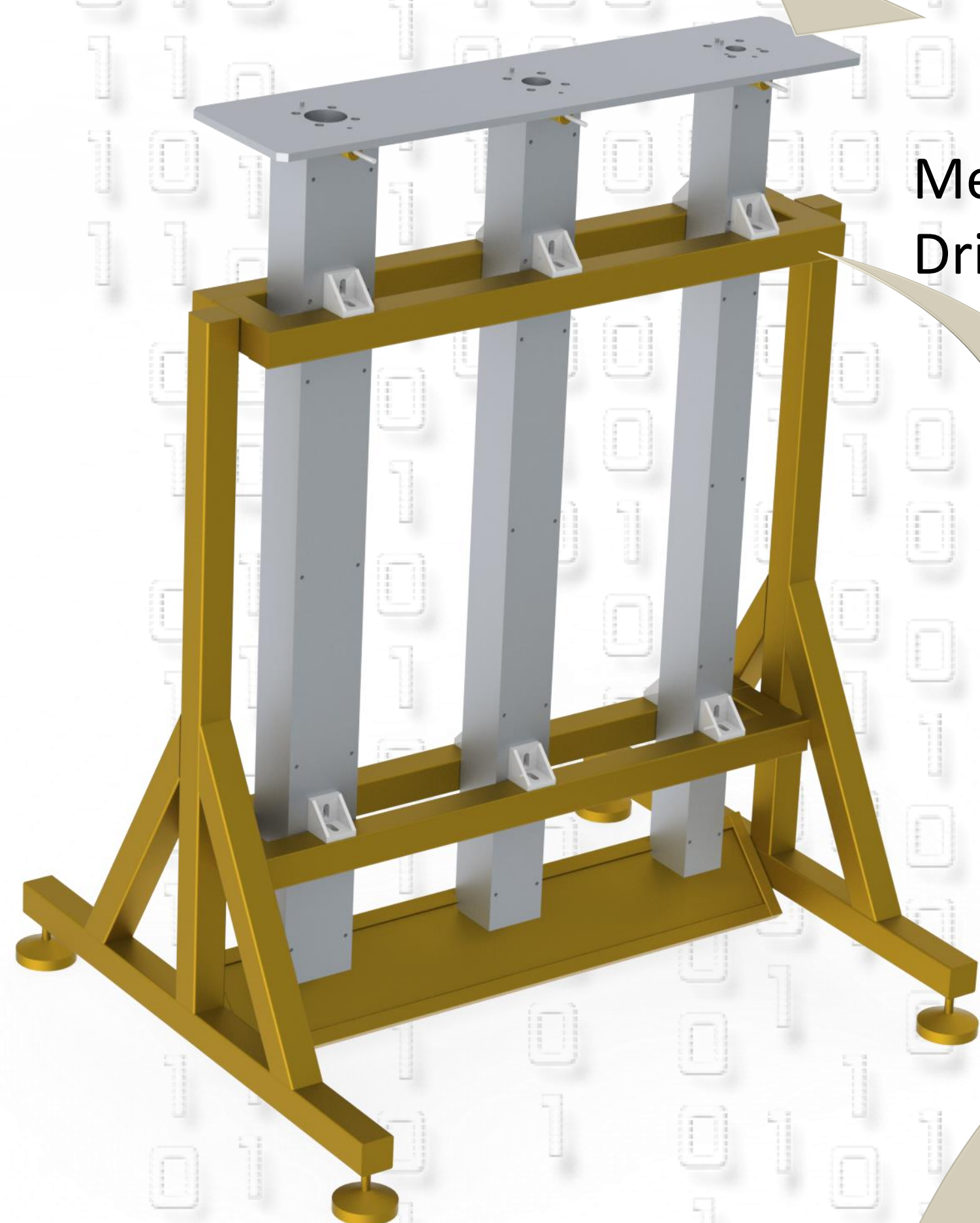
REAL WORLD

VIRTUAL WORLD

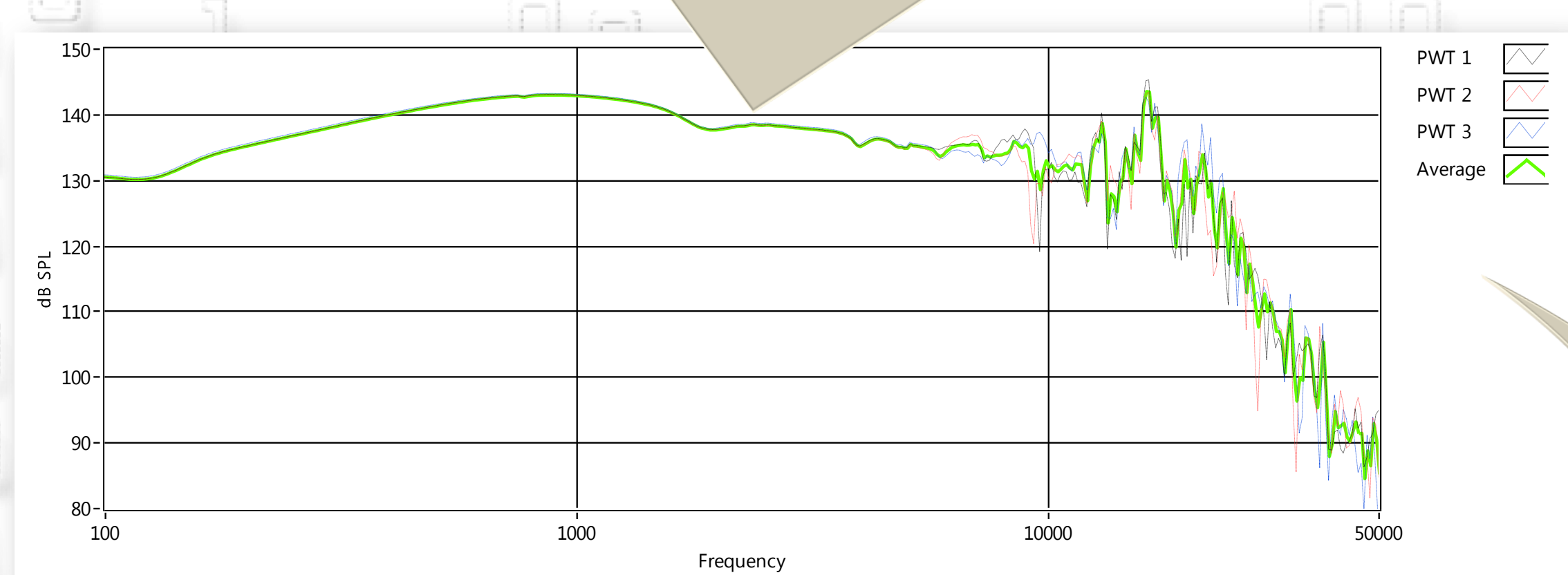
Selecting a Compression Driver



Measuring Compression Driver on a Plane Wave Tube

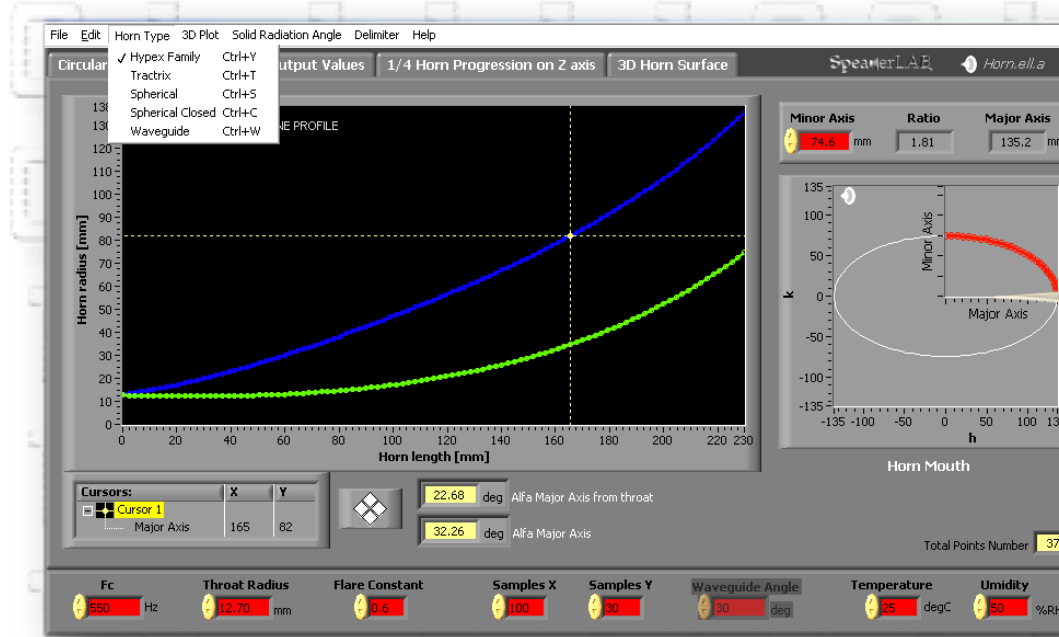


Using Audiomatica Clio System® to assess measurement

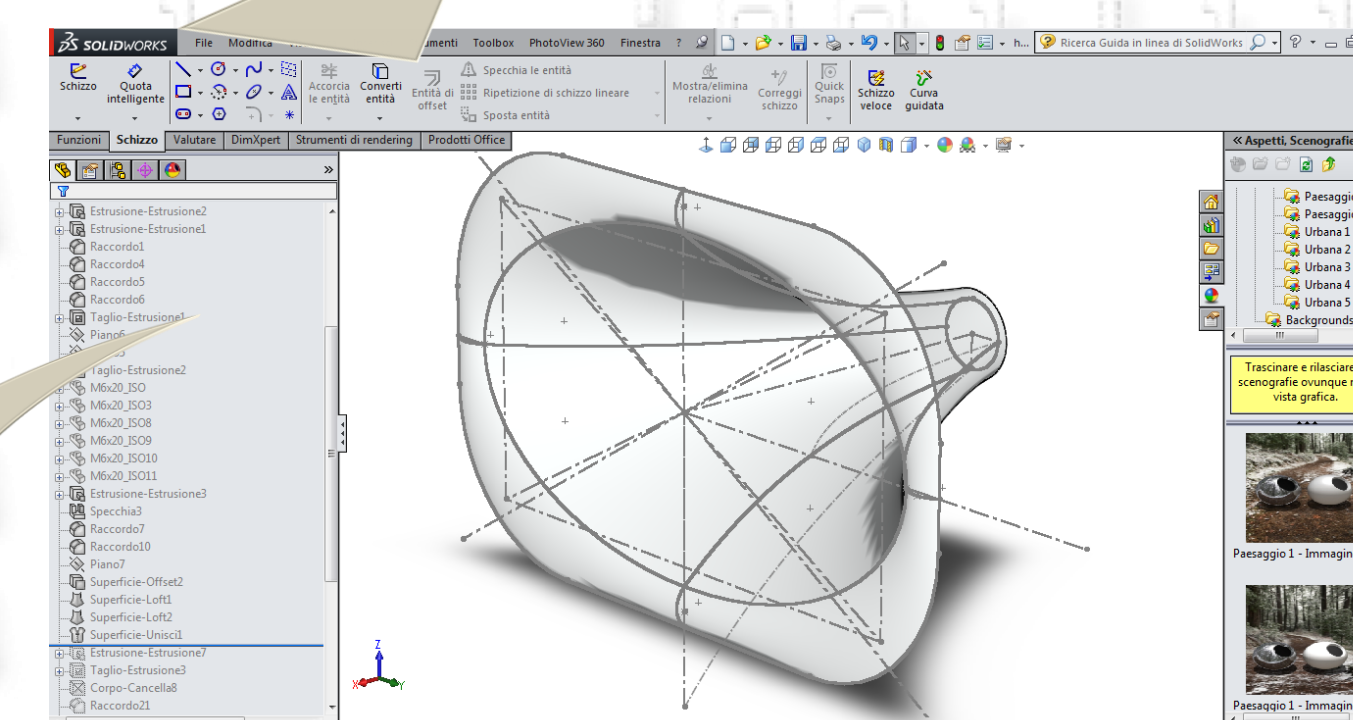


SPL frequency response of a compression driver loaded by a PWT

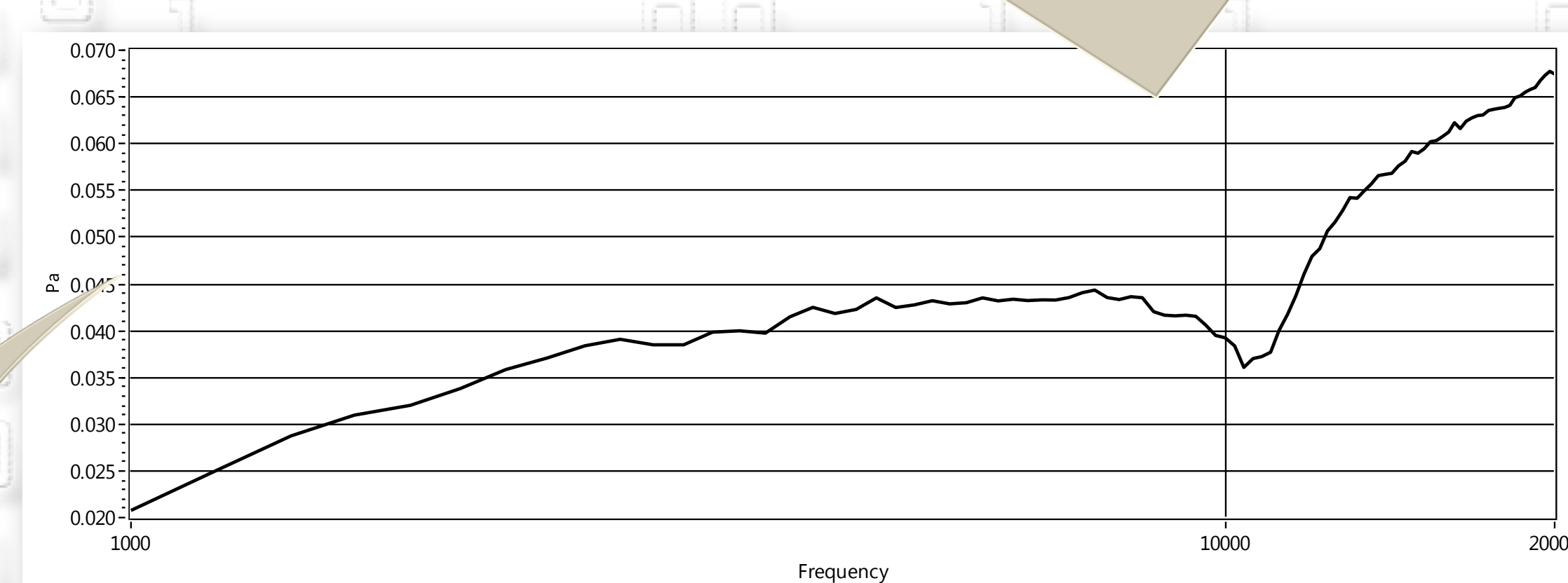
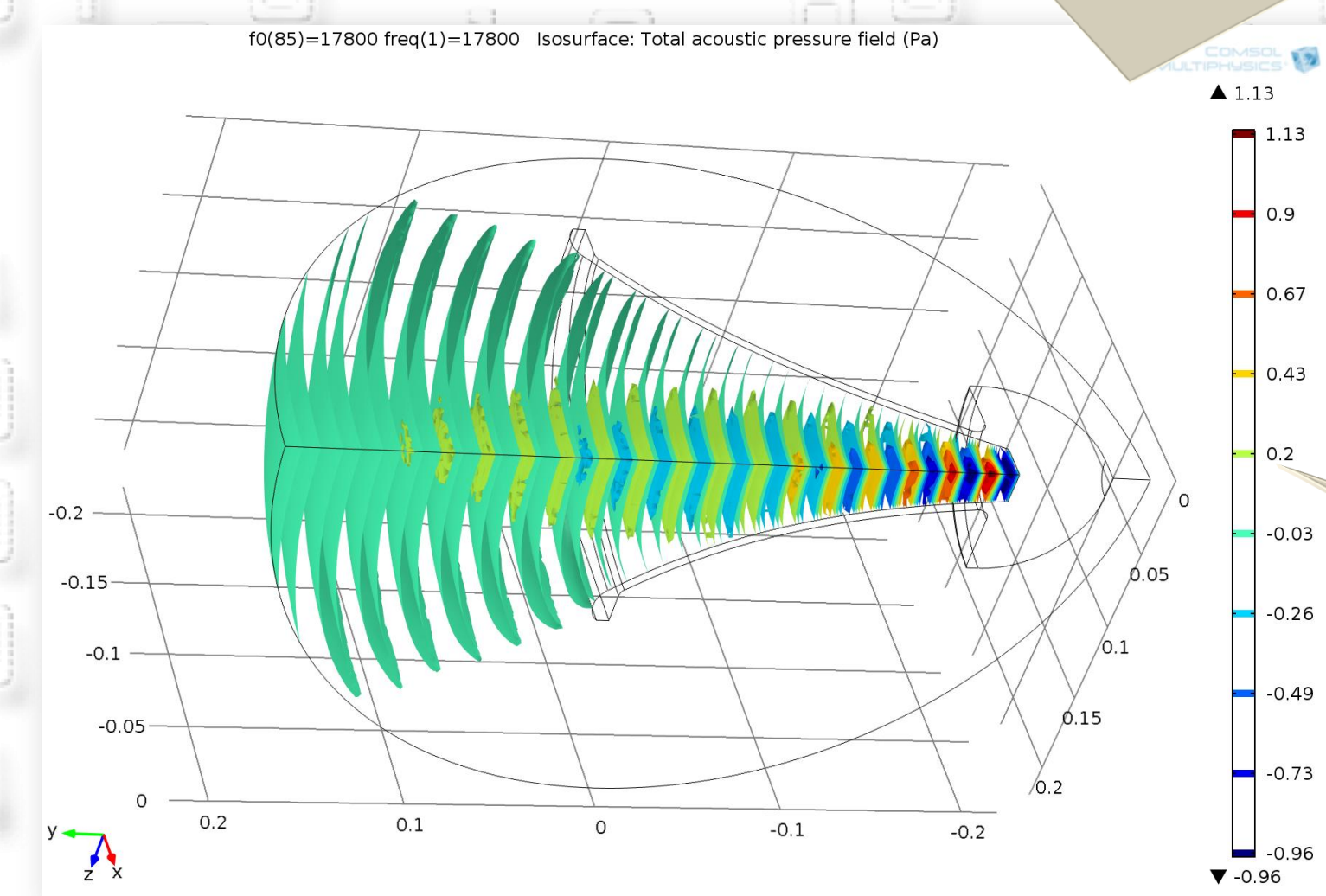
Defining a mathematical Horn profile in SpeakerLAB® Horn.ell.a



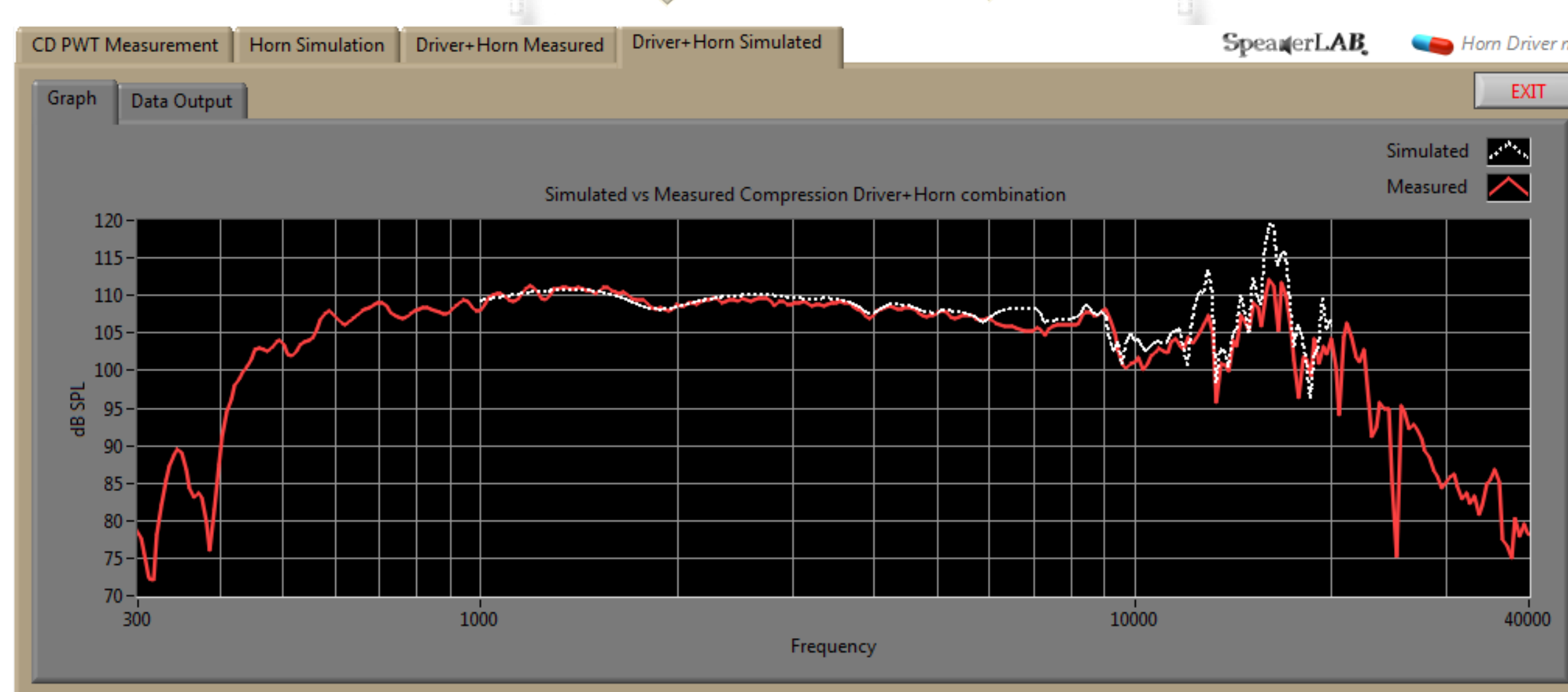
Importing profile and build a solid geometry with SolidWorks®



Importing and simulating acoustic domains with Comsol Multiphysics®

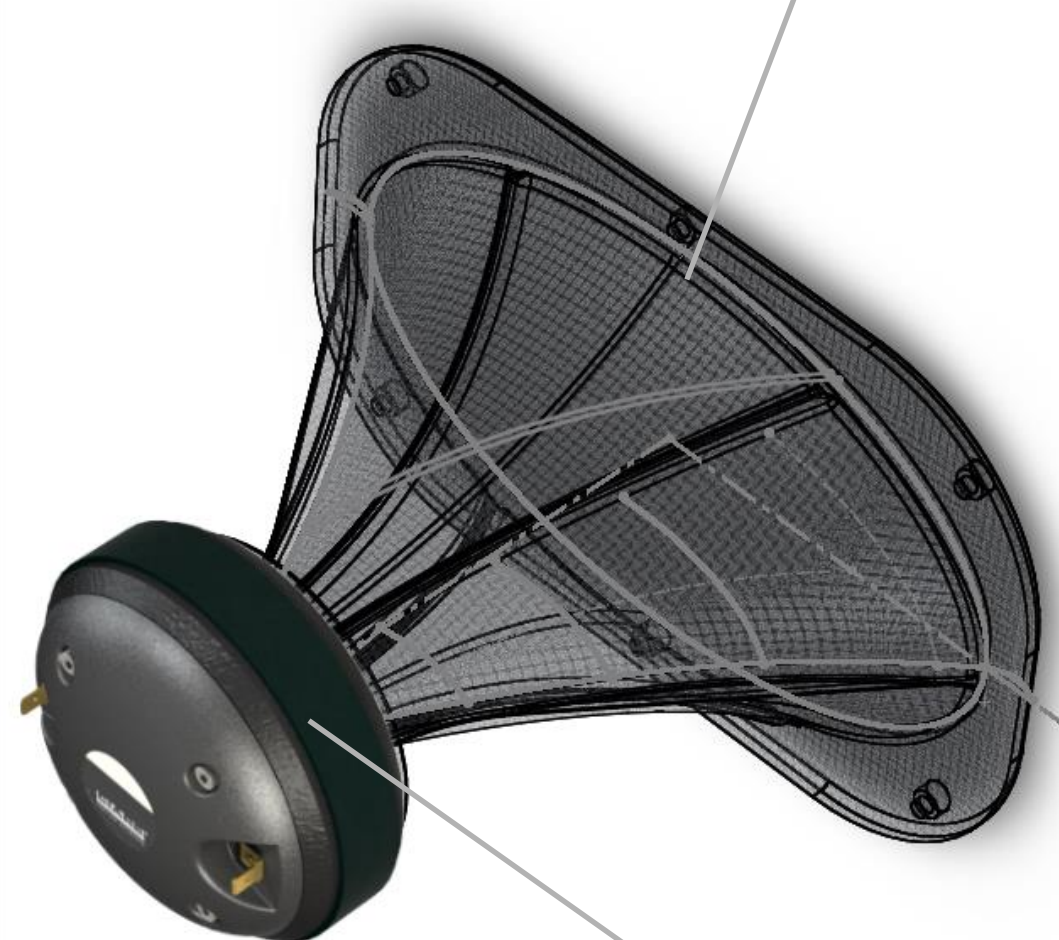


Throat-to-mouth sound pressure frequency response of the simulated horn

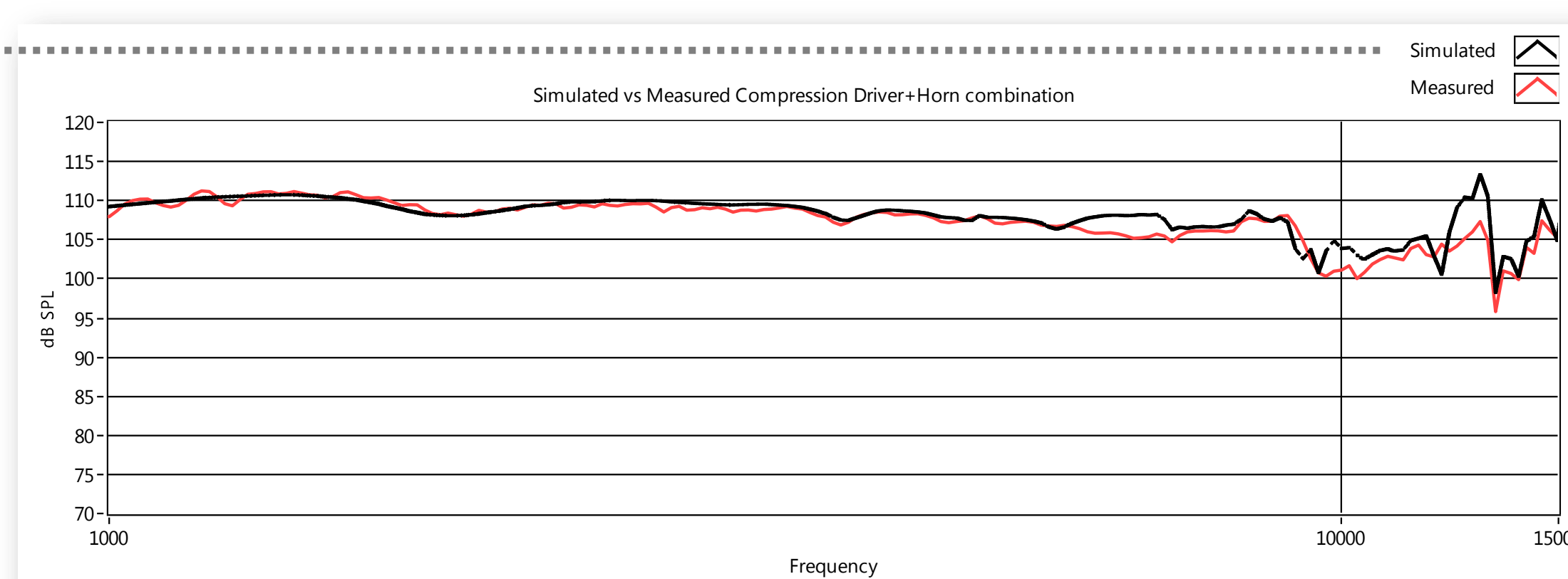


Importing PWT measurement and Comsol simulation in a new software tool for resampling and data processing

Simulated Horn



Real Compression Driver



Measured and simulated absolute sound pressure frequency response (1 ÷ 15 kHz) of the horn driver



Measuring real objects in anechoic room with the horn fast prototype