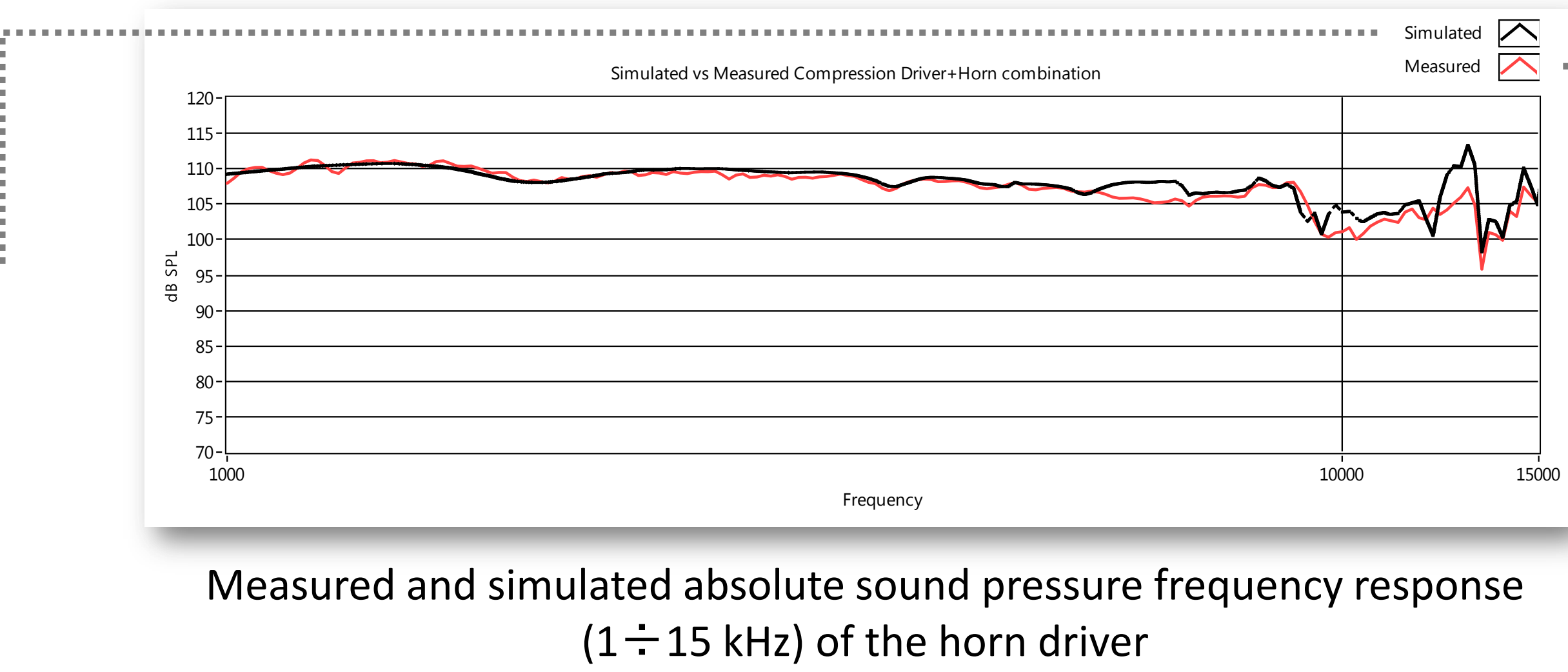# Simulation of Horn Driver Response by Direct Combination of Compression Driver Frequency Response and Horn FEA
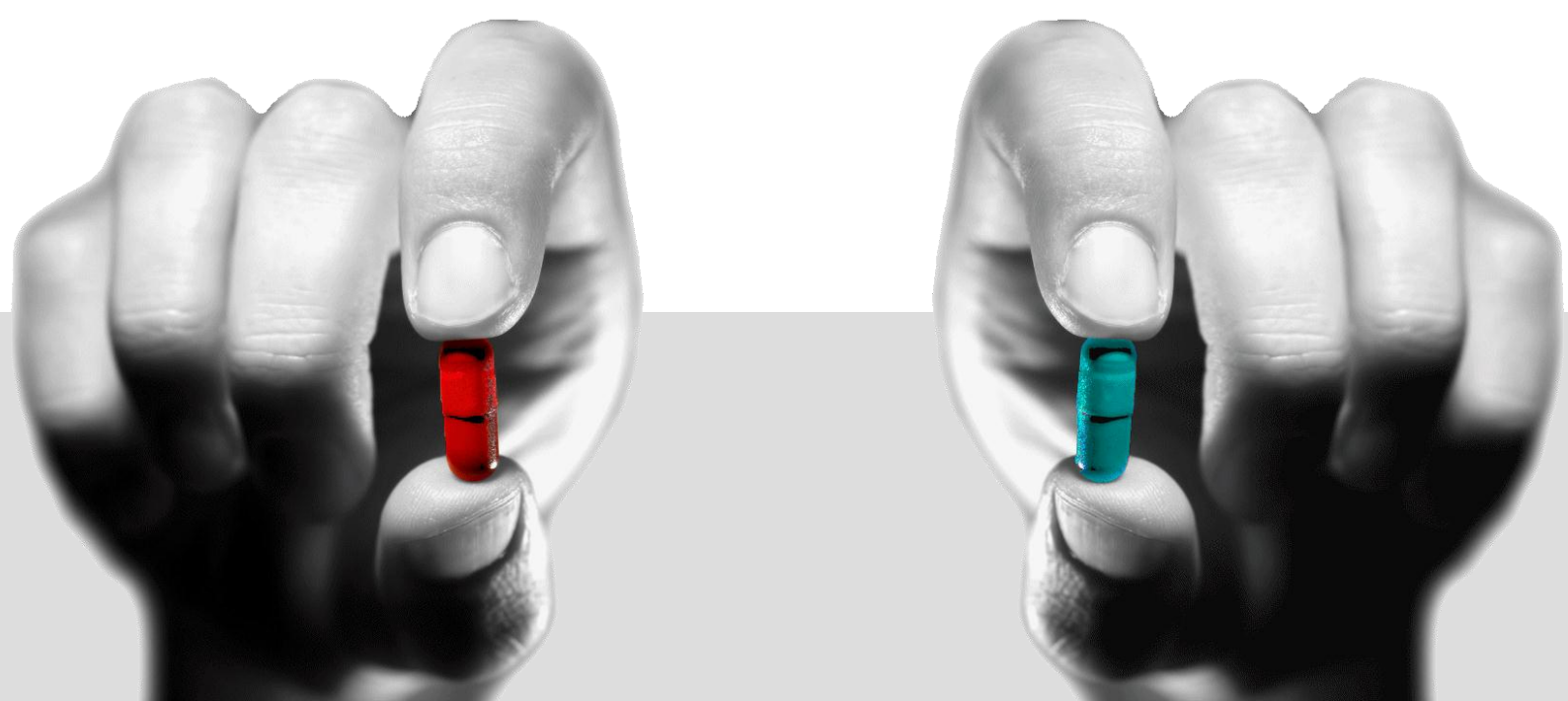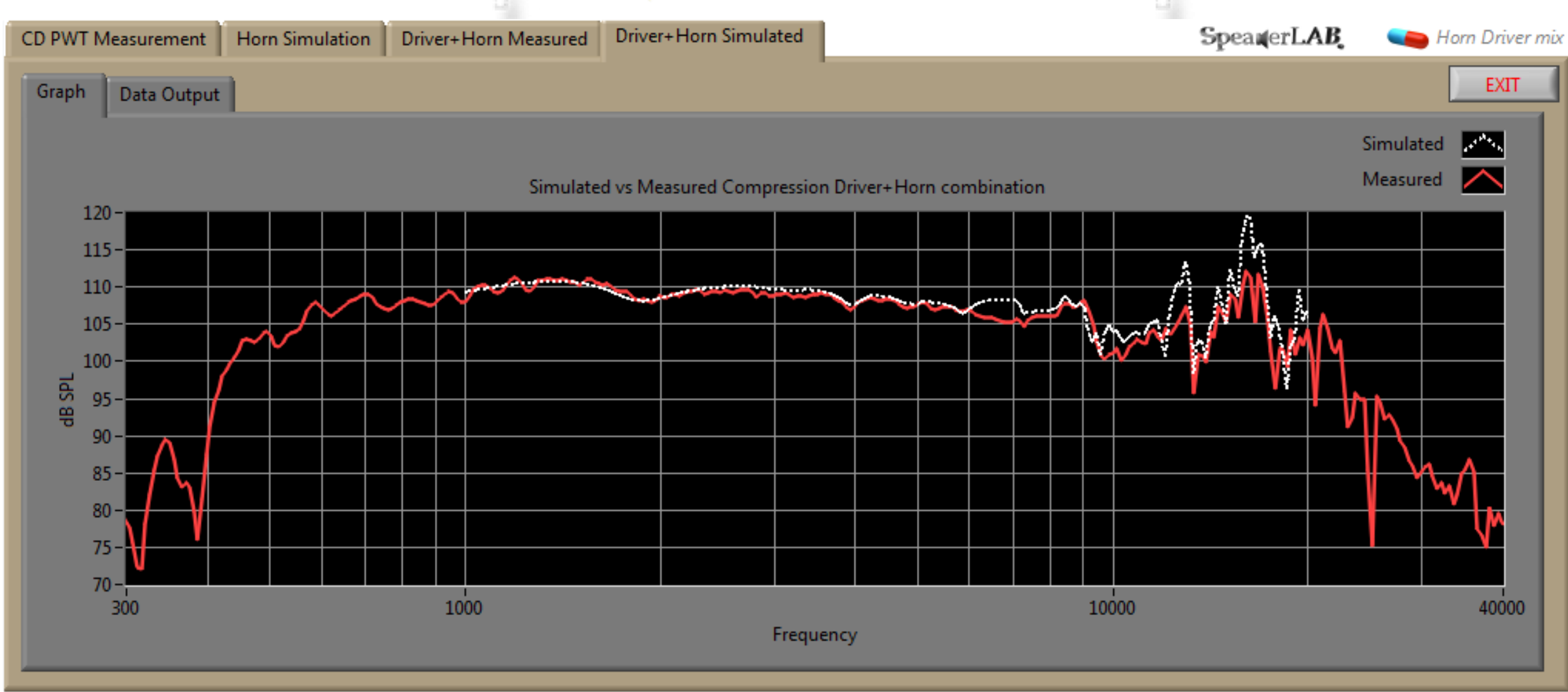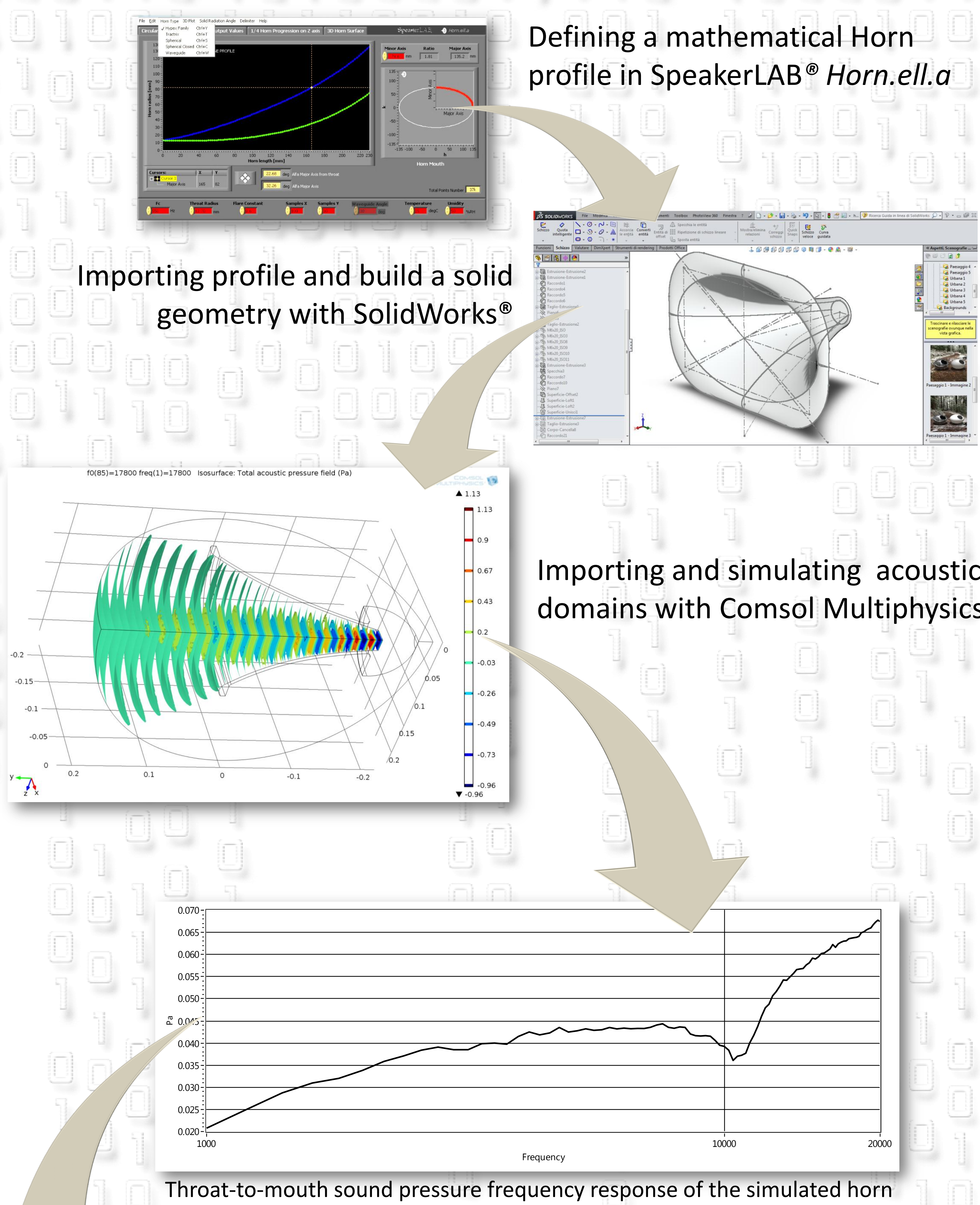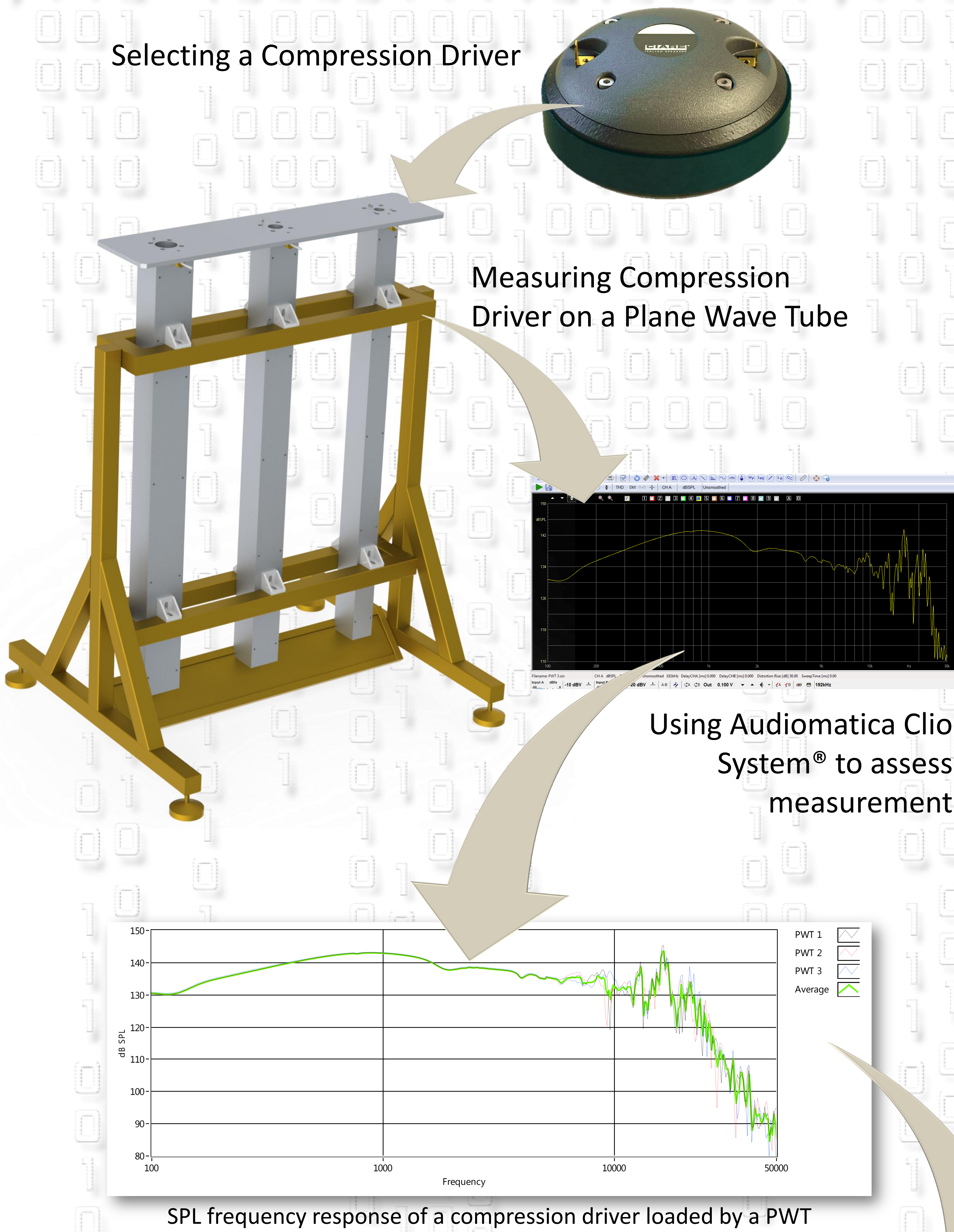
REAL WORLD

VIRTUAL WORLD

Selecting a Compression Driver

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

Measuring Compression Driver on a Plane Wave Tube

Importing profile and build a solid geometry with SolidWorks®

Using Audiomatica Clio System® to assess measurement

Importing and simulating acoustic domains with Comsol Multiphysics®

SPL frequency response of a compression driver loaded by a PWT

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