



POLITECNICO
MILANO 1863

MSC. MUSIC AND ACOUSTIC ENGINEERING

MUSICAL ACOUSTICS - A.Y. 2020/2021

H5 - Synthesis of the guitar sound

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1 Bridge impedance

The bridge impedance is computed as the ratio between the pressure action on the sound plate and the volume flow in the sound hole. The bridge is modeled as a two-masses system in which each element is assumed to be lumped; a reasonable assumption considering that we are interested in. The equivalent electrical circuit shows how the pressure on the wood plate is distributed on every element; our aim is to