



ENVIRONMENT SIMULATOR FOR AUDIO SIGNALS (ThuAmPO2)

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✳ **Abstract :** This paper describes an application developed in Matlab to achieve, from different signals, the signal reaching the different microphones of a linear cluster with equally-spaced elements. These signals can be used to perform simulations and listen to them to see the room effects. The application permits to obtain the signals in an anechoical environment (open space) and in a rectangular room, using the image method. In this last case, in addition to the cluster signals, the impulse response between source and receiver (selectable) can be viewed. Response viewing and simultaneous hearing of signals enable students of introductory modules in signal processing to understand the concept of impulse response and its meaning in room acoustics.

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