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# Modal active control of linear structures. Applications to musical instruments

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## Abstract

Modal active control has been successfully applied to the vibration reduction of mechanical systems. This method initially developed to target the control only on the mode of interest and to minimize the number of actuators and sensors also has the potential for adjusting finely the modal frequencies and dampings of musical instruments. After introducing the modal active control approach, applications on the cello, the guitar, and on a simplified clarinet will be presented, focusing on the effects on the sound and playability of these instruments.

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