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Audacity for teaching the Physics of Music HERBERT JAEGER, Miami University — Many colleges and universities have a course on the physics of music in their curriculum, and almost always such a course is directed at nonphysics majors and even non-science majors. This means that course materials must be presented without heavy (or any?) reliance on complex mathematical concepts, and thus a great deal of in-class demonstrations combined with video clips are used instead. The open-source software Audacity is a tool that allows demonstration of a number of concepts that otherwise would only be possible using advanced mathematical concepts, such as autocorrelation, Fourier transform, and complex filters. In this talk we present a number of examples how Audacity is being used in the "Physics for Music" course (PHY 131) at Miami University.

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