Abstract Submitted
for the TSS10 Meeting of
The American Physical Society

Standing Waves on Free-End Strips of Metal and Wood NATNAEL ABATE[1], ISMAEL MATA[2], ABIY TESFAYE[3], KEN TAYLOR[4], Lake Highlands High School in Dallas — The work described in this paper discusses the results of experiments involving standing waves on long flat strips of wood and metal and on simple tubing. The strips are arranged such that one end is fixed (connected to the driving device) and the other end is free. The resonant behavior of a system with these boundary conditions provides an interesting alternative to that provided by fixed-fixed strings. The data presented show a system with the expected antinode at the free end and node at the fixed end. The ideas and examples discussed in this presentation serve as examples of free-fixed behavior that teachers can easily duplicate in their classrooms.

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Date submitted: 22 Feb 2010 Electronic form version 1.4