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Nemanja Kosovalic* (kosovalic@southalabama.edu), Mobile, AL , and **Brian Pigott**, Spartanburg, SC. *Self-excited vibrations in damped 1-D wave equations.*

We discuss a result concerning the bifurcation of periodic solutions in damped wave equations, which are induced by the presence of a time delay in the feedback. In contrast with forced vibrations, the bifurcating periodic solutions are self-excited and the mechanism is a Hopf bifurcation. (Received October 11, 2016)