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**Jeonghun J. Lee\***, Sid Richardson Science Building, One Bear Place #97328, Waco, TX 76798.

*Numerical methods for time-transient wave propagation in acoustic metamaterials.*

Waves in metamaterials show unconventional propagation patterns and there are many potential applications of metamaterials. In this talk we consider mathematical models and numerical methods for wave propagation in acoustic metamaterials. We discuss finite element discretization, the error analysis, and applications. (Received August 04, 2020)