

1135-F1-2711 **Andrew Diener*** (adiener@cbu.edu), 36 South Merton, Memphis, TN 38112, and **Cathy Grilli**.
Using Music to Increase Understanding and Performance in Trigonometry. Preliminary report.

Music is an art that is particularly appropriate to trigonometry classroom. Aspects of it are an application of trig, and it can also be used as a device to remember basic rules. In a Student MAA meeting we used graphing calculators and tuning forks to see that sinusoids really do occur outside of the classroom. We wanted to connect the student experience in this activity to actual course material. A consideration in activities is the time restriction in a class so we invited students to an out of class session. There they produced graphs of several notes using a tuning fork app. As a group activity, they determined equations for the functions describing those graphs. The period was compared with the frequency of each note. There was some investigation of chords. We next appealed to their creative side. A student shared a jingle learned in high school as a memory device for trig identities. We challenged each group to come up with either a musical or graphic representation that would help other students remember some identity or concept from trig. This activity was a joint project from different pathways we offer to prepare students for Calculus I. In this paper we will share our experiences. (Received September 26, 2017)