

1124-00-25

**Dirk R. H. Schlingmann\*** ([dschlingmann@uscupstate.edu](mailto:dschlingmann@uscupstate.edu)), 800 University Way, Spartanburg, SC 29303. *Mathematics and Music*.

I will present my work on how I use mathematics and technical computing software to analyze, manipulate, and create music. Musical pieces are available as Musical Instrument Digital Interface (MIDI) files. I will compare the work of well-known composers through statistical analysis, and will present variations of their compositions by performing geometrical transformations on their musical data. Furthermore, I will play musical creations that are entirely based on mathematical functions. (Received July 25, 2016)