

1145-D1-1043      **Anil Venkatesh\*** ([anilvenkatesh@ferris.edu](mailto:anilvenkatesh@ferris.edu)). *Enumeration of Internal Symmetries in Musical 12-Tone Rows.*

In music, a 12-tone row is any of the  $12!$  possible orderings of notes in the Western chromatic scale. The musical notes of a 12-tone composition must always arise in the same order, cycling repeatedly through a predetermined “row” of twelve notes. The repetitive structure of 12-tone music lends itself to mathematical study. In 2003, Hunter and von Hippel investigated symmetry in 12-tone rows, using group theory to enumerate equivalence classes of rows under a group of music-theoretic symmetries. They found that highly symmetric rows constitute just 0.13 (Received September 18, 2018)