

Pieces that are a single full cycle of a polyrhythm
(beginning and ending on a tutti rhythmic unison)

by Erik Carlson

2022 - ongoing

43:51:52:55:59

A polyrhythm that contains every melodic permutation of 5 notes when each speed is assigned to a different pitch.

25:144

A polyrhythm where the shortest time between two adjacent notes is one second when a single full cycle lasts for one hour.

16:17:19:20:21:22:23:24:25:26:27:30

A polyrhythm in which a 12-tone row appears melodically in each of the 4 classical transformations (prime, inversion, retrograde, and retrograde inversion).

There are a several options for assigning pitches to the twelve speeds, but most pairings will not work.

I suggest assigning the pitches:

g a d g# a# d# f e c# b f# c

to the speeds in order from slowest to fastest.

7:8:9:14:16:18:21:24:27:28:32:36

A 4-voice prolation canon on a 3-note melody.

I suggest assigning the notes of a chromatic scale to the 12 speeds, the lowest pitch to the fastest speed.

0:1

A single tone.

1:2:3:4 ... 999:1000

A full cycle lasts one year, from midnight on January 1 to midnight on January 1.

Performers may tap into it at any time.

I suggest assigning all speeds to a single pitch or sound.

1:2

A full cycle lasts one year, beginning at the first rhythmic unison.

1:Φ

A polyrhythm of one to phi, the golden ratio.

A full cycle lasts for eternity. For this piece, the cycle started at midnight on my birthday, March 31, 1980. The tempo is that the slower speed sounds once per minute.

Performers may tap into it at any time.

17:19:20:21:23:25:26:29:30:31:33

A polyrhythm that contains every 6-note set class when the 11 pitches c through a# are assigned to the 11 speeds from slowest to fastest.