

canons and rounds  
(for dither)

for 4-6 guitars

Polansky  
2015-16

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for 4-6 guitars

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*canons and rounds* is in two parts: 1) canons and 2) rounds.

Part 2 follows without pause from part 1 (see below).

All guitars are retuned to harmonic series pitches whose fundamentals are themselves harmonic series pitches of C (in Guitar 1). The combined tuning is nearly non-coincidental, only 1 pitch is the same (in the same register) on any two guitars (Guitars 1 and 3, first string).

### *canons*

Part 1 is a multi-tempo canon. All pitches are natural harmonics (1-5, including the open string as 1).

The score is notated as if the guitars are tuned conventionally (that is E, A, D, G, B, E). The score is tablature, and doesn't reflect the actual sounding pitches (different for each guitar). For example, "VI/1" indicates that the open VI string is played (always notated as a low E, whatever the actual sounding pitch is). Likewise, "IV/5" means play the 5<sup>th</sup> harmonic on the IV string, notated as the string (solid notehead) with diamond (the suggested node) a M<sup>6</sup><sup>th</sup> above (generally the easiest of the four places on the string to play that harmonic).

Guitar 1 is the slowest tempo, perhaps around 35-40. Other guitars choose their own faster tempi. Any guitar can enter anytime during Guitar 1's part. One suggestion is to calculate some entrances so some parts end together, as in the manner of my "four voice canons." For example, one guitar may be twice as fast as Guitar 1, and enter exactly halfway thru its part. Any ratios and entry schema are possible. The ensemble creates its own version. Guitars 2-6 may also end later than Guitar 1.

The harmonic melody should be legato, quiet, and rhythmically faithful, but not necessarily metronomic (no fermata on the held notes, for example). Dynamics, articulations and small-scale rhythms are flexible. To minimize attack noise, I recommend playing the harmonics (RH) with the flesh of the fingers, and not use the fingernail or a pick.

### *rounds*

As soon as the first guitar finishes its voice in the canon, the 6-part round begins. Once entered, each guitar moves thru all six voices at a set tempo (which should be as fast as all players can comfortably play the parts). When each subsequent guitar finishes hisr part in the *canons*, they wait for the beginning of an unoccupied round voice, and start the round themselves, in tempo, at the beginning of the first line. It would be ideal, but not crucial, if all voices of the round are eventually and uniquely covered (given six performers) — a performer should wait a line or two before beginning so as not to duplicate a line already being played.

Alternatively, the round may begin on cue, together, after all guitars have finished. The voices of the round should be distributed among the guitars beforehand.

After some number of times thru the round (once all have entered), Guitar 1 should remain on voice 6, repeating, and other guitars should do the same when they arrive there. Once all guitars have accumulated on line 6, in unison, the ensemble should move on cue to the *coda*, one guitar per line (see the *coda* for instructions for more details). The *coda* should be played as fast as possible.

Like the *canons*, the *rounds* are written in conventional tuning — sounding pitches are not indicated.

*Canons and Rounds* was premiered by Dither, at The Stone, NYC, on 2/8/16, with James Moore, Taylor Levine, Jeremy Schulick, Giacomo Fiore, and Josh Lopes (guitars). Thanks to Giacomo Fiore for valuable edits to the score.

Larry Polansky  
Santa Cruz, 1/27/16

# canons and rounds

## guitar tunings

Guitar	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	Measure 6
Guitar 1	+0 C:1	-49 C:11	-31 C:7	+2 C:3	+41 C:13	* -14 C:5
Guitar 2	-47 G:11	+2 G:1	+4 G:3	-29 G:7	-12 G:5	+43 G:13
Guitar 3	-45 E:7	-12 E:3	+27 E:13	-28 E:5	+37 E:11	* -14 E:1
Guitar 4	+20 Bb:11	-31 Bb:1	-45 Bb:5	+10 Bb:13	+38 Bb:7	-29 Bb:3
Guitar 5	-8 F#:13	-63 F#:5	-47 F#:3	-49 F#:1	+2 F#:11	+20 F#:7
Guitar 6	-18 Ab:13	+41 Ab:1	+43 Ab:3	+10 Ab:7	+27 Ab:5	-8 Ab:11

Tunings given in cents deviations from the nearest equal tempered pitch.

All guitar tunings based on harmonics of C: 1, 3, 5, 7, 11, 13 (guitars 1–6). Each guitar then tunes to those same harmonics but of the new fundamental. For example, the VI string of guitar 3 is the 7th harmonic of the 5th harmonic (E), or the 35 harmonic of C, which is 45¢ flat of D. Except for one case (Guitar 1, I string/Guitar III, I string), no same numbered strings are tuned the same between any of the guitars.

# canons and rounds (canons)

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(♩ = 35) *(for slowest voice, all other voices choose their own faster tempi)*

The musical score is written in 4/4 time and consists of five staves of music. Each staff begins with a treble clef and a 4/4 time signature. The music is a canon, with each staff representing a different voice part. The notes are primarily quarter and eighth notes, with some slurs and accents. Below each staff is a line of figured bass notation, which consists of Roman numerals and slash notation (e.g., VI/1, IV/2, etc.) indicating the harmonic structure. The figures are: Staff 1: VI/1 VI/2 VI/4 VI/5 V/2 V/3 V/4 V/5 IV/1 IV/2 IV/2 IV/3 IV/4 IV/3 IV/2 IV/2 IV/1 IV/2; Staff 2: IV/3 IV/4 IV/5 III/1 IV/5 III/1 IV/5 III/1 III/2 III/1 III/2 III/1 IV/5 IV/5 IV/4 IV/4; Staff 3: IV/5 III/1 III/2 III/3 III/3 III/4 III/3 III/4 III/3 III/4 III/3 III/4 III/3 III/3 III/2 III/1 IV/5; Staff 4: III/1 IV/5 III/1 III/1 III/2 III/2 III/3 III/2 III/3 III/3 III/2 III/3 III/2 III/1 III/1 IV/5; Staff 5: IV/5 III/1 III/2 III/3 III/3 III/4 III/4 III/5 III/4 III/5 II/1 III/5 III/5 III/4 III/3.

canons and rounds  
(canons)

16

III/4 III/4 III/5 II/1 II/2 II/3 II/4 II/5 II/4 II/5 I/1 II/5 II/4 II/5 II/4 II/3 II/2 II/1

19

II/1 II/2 II/3 II/2 II/3 II/4 II/3 II/2 II/3 II/4 II/3 II/4 II/3 II/2 II/1 III/5

22

II/1 II/2 II/2 II/3 II/3 II/4 II/5 II/4 II/5 I/1 II/5 II/4 II/4 II/3

25

II/3 II/2 II/2 II/3 II/4 I/1 I/1 I/2 I/3 I/4 I/3 I/4 I/3 I/3 I/2 I/2

28

I/1 I/1 II/5 I/1 I/2 I/3 I/3 I/4 I/3 I/4 I/5 I/4 I/3 I/4 I/3 I/3 I/2 I/1 II/5 I/1 I/2

31

I/1 I/2 I/3 I/3 I/2 I/1 I/2 I/1 II/5 II/4 II/2 II/1 III/5 III/4 III/3 III/4 II/1 II/2 II/3 II/4 II/5 I/1

canons and rounds  
(canons)

34

1/2 1/1 1/2 1/3 1/2 1/2 1/1 II/5 1/5 1/4 1/4 1/3 1/3 1/2

37

1/2 1/1 II/5 II/5 1/1 1/1 1/2 1/3 1/4 1/5 1/4

40

1/5 1/4 1/4 1/3 1/3 1/2 1/1 II/5 II/3 II/4 II/3 II/4 II/4 II/5 II/4 II/5

43

II/4 II/5 II/4 II/3 II/3 II/2 II/1

46

II/5 II/1 III/5 II/1 II/1 II/2 II/2 II/3 II/4 II/3 II/4 II/3 II/4 II/3

49

II/2 II/1 II/2 II/1 II/1 II/2 II/3 II/4 II/4 II/5 II/5 1/1 II/5 1/1 II/5 II/5 II/4 II/3 II/2 II/1

canons and rounds  
(canons)

52

III/5 III/5 II/1 II/2 II/1 II/1 III/5 III/4 III/5 III/4 III/5 III/5

55

III/4 III/4 III/3 III/2 III/1 III/2 III/3 III/3 III/4 III/3 III/4 III/4 III/3

58

III/2 III/3 III/2 III/2 III/1 IV/5 IV/4 IV/3 IV/4 IV/5 III/1 III/2 III/2 III/3 III/2 III/3 III/4 III/3

61

III/3 III/2 III/2 III/1 III/1 IV/5 IV/5 III/1 III/1 III/2

64

III/3 III/2 III/1 III/2 III/2 III/1 III/2 III/1 IV/5 IV/4 IV/3 IV/2 IV/3 IV/2 IV/3 IV/4 IV/3 IV/4 IV/3 IV/3

67

IV/2 IV/1 V/5 V/4 V/3 V/1 VI/5 VI/4 VI/3 VI/4 VI/1



# canons and rounds (rounds)

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Fast, dynamics ad lib  
except where notated

natural harm., (12,9,7,5, or 4th fret)  
start high in pitch (voice 1)  
move lower for each voice

① *8va* *loc.* *8va* *gl.* *gl.* *open string, or any harmonic on it, occasional double stops with adjacent strings* *tap, alternate hands*  
I II I III I 5 II I VI-I (arp. up or down) I (with slide) p f I II

② *(tap)* II I II I II III II II III II IV 5 II VI-I II *gl.* *gl.* II p f p

③ III *(tap)* III IV III V III 5 III VI-I III *gl.* *gl.* III f p f

④ IV *(tap)* IV IV V IV VI 5 IV VI-I IV *gl.* *gl.* IV f p

⑤ V *(tap)* V IV V VI V VI VI-I V VI V VI-I VI *gl.* *gl.* V p

⑥ *(octave harmonics)* 5 VI-I (last line: can be open strings) VI *gl.* VI f I II III IV V VI

(as in canons, score is written as if guitars are tuned conventionally)

(after all have accumulated on voice 6, go on cue, without pause to coda)

## coda (string round): very fast, loud

All start together, immediately on cue after accumulating on line 6 of the previous page.

Each guitar stays on one line, moving thru open strings (or 2nd harmonics), generally, from VI to I and back down. Repeat enough times to traverse the strings at least twice.

Occasionally strings may be played out of order ad lib. Go up and down several times, end together on cue.

