

*Pitch Gradient with Noise in F#*

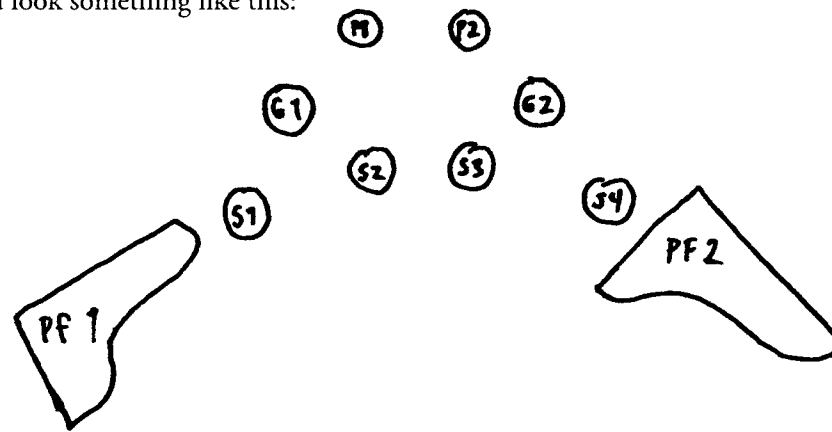
*for 2 percussion, 2 grand pianos, 2 guitars, and 4 bowed string instruments*

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Jordan Dykstra, 2016

*Pitch Gradient with Noise in F#*  
PERFORMANCE NOTES

- I. Score in C.
- II. Pitches should be thought of as pitch classes and thus may be voiced in any octave. String players may also use harmonics, sul ponticello, and/or sul tasto.
- III. Instead of a pitch, any player may choose to produce a quiet, sustained noise (on their instrument). Eg. bowing the wooden body or tailpiece of their instrument, sliding their finger up/down the string, etc.
- IV. Single or multiple players to a part is fine.
- V. Very quiet throughout, with minimal entrances/exits, and without vibrato.
- VI. Guitar and piano players should always use an Ebow. Piano players: using a wedge for the sustain pedal will be useful; when the sustained note is finished lift the Ebow from the string, allowing the tone to fade naturally.
- VII. String players will need to use a tuner with a contact microphone to find the cent deviations from equal temperament.
- VIII. Percussionists should find non-pitched “instruments” capable of being sustained, possibly through bowing, and that provide noise (or unstable pitch). Eg. bowed woodblock, stones continuously rubbed together, a soft brush on a drum head, lightly bowed metal objects, steady stream of rice or sand on a cymbal, etc.
- IX. The performance layout should look something like this:



0''

1'



Musical score layout with the following staves from top to bottom:

- PERCUSSION 1
- PERCUSSION 2
- PIANO 1
- PIANO 2
- GUITAR 1
- GUITAR 2
- BOWED STRING 1
- BOWED STRING 2
- BOWED STRING 3
- BOWED STRING 4

1'

2'

PERC 1 || PP

PERC 2 || PP

PF 1  $\pm 0c$   
Ped, w/Ebow

PF 2  $\pm 0c$   
Ped, w/Ebow

GTR 1  $+8c$   
pp w/Ebow

GTR 2  $+10c$   
pp w/Ebow

STR 1  $nv +4c$   
pp

STR 2  $nv +3c$   
pp

STR 3  $nv +10c$   
pp

STR 4  $nv +11c$   
pp

2'

3'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
(40)

PF 2  $\pm 0c$   
(40)

GTR 1  $+8c$   
(40)

GTR 2  $+10c$   
(40)

STR 1  $+4c$   $+19c$   
(40) 40

STR 2  $+13c$   
40

STR 3  $+10c$   
(40)

STR 4  $+11c$   
(40)

3'

4'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
(40)

PF 2  $\pm 0c$   
(40)

GTR 1  $+8c$   
(40)

GTR 2  $+10c$   $+33c$   
(40)

STR 1  $+19c$   
(40)

STR 2  $+27c$   
(40)

STR 3  $+30c$   
(40)

STR 4  $+17c$   
(40)

4'

5'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
(40)

PF 2  $\pm 0c$   
(40)

GTR 1  $+8c$   
(40)

GTR 2  $+33c$   
(40)

STR 1  $+38c$   
(40)

STR 2  $+27c$   
(40)

STR 3  $+30c$   
(40)

STR 4  $+29c$   
(40)

5'

6'

PERC 1 II

PERC 2 II

PF 1  $\text{C}$

PF 2  $\text{C}$   $\pm 0c$   
(40)

GTR 1  $\text{C}$

GTR 2  $\text{C}$   $+33c$   
(40)

STR 1  $\text{C}$   $+38c$   
(40)

STR 2  $\text{C}$   $+47c$   
(40)

STR 3  $\text{C}$   $+43c$   
(40)

STR 4  $\text{C}$   $+50c$   
(40)

Detailed description: This is a handwritten musical score for a multi-instrument ensemble. The score is organized into eight staves, each with a different instrument label on the left. The top two staves are for Percussion (PERC 1 II and PERC 2 II) and are marked with double vertical lines. The next two are for Piano (PF 1 and PF 2), followed by two for Guitar (GTR 1 and GTR 2), and finally four for String instruments (STR 1, STR 2, STR 3, and STR 4). Each of the PF, GTR, and STR staves begins with a treble clef and a common time signature (C). The string parts (STR 1-4) feature a single note on the first line of the staff, with a handwritten time signature of 40 below it. Above each of these notes is a handwritten tempo or performance instruction: +0c for PF 2, +33c for GTR 2, +38c for STR 1, +47c for STR 2, +43c for STR 3, and +50c for STR 4. The percussion parts (PERC 1 II and PERC 2 II) consist of a single horizontal line with a wavy texture, suggesting a sustained or oscillating sound. The piano part (PF 1) is a blank staff. The guitar part (GTR 1) is also a blank staff. The entire score is contained within a rectangular frame that has arrows pointing to the right at the end of each staff line.



6'

7'

PERC 1 ||

PERC 2 ||

PF 1  $\text{♩}$

PF 2  $\text{♩}$   $\pm 0c$   
(40)

GTR 1  $\text{♩}$  -48c  
#0

GTR 2  $\text{♩}$  -44c  
#0

STR 1  $\text{♩}$  -47c  
#0

STR 2  $\text{♩}$  +47c  
(40) -40c  
#0

STR 3  $\text{♩}$  -43c  
#0

STR 4  $\text{♩}$  +50c  
(40)

7'

8'

PERC 1 ||

PERC 2 ||

PF 1  $\text{♩}$

PF 2  $\text{♩}$

GTR 1  $\text{♩}$   $-48c$   
 $(\#o)$

GTR 2  $\text{♩}$   $-44c$   $-27c$   
 $(\#o)$   $\#o$

STR 1  $\text{♩}$   $-47c$   
 $(\#o)$

STR 2  $\text{♩}$   $-40c$   
 $(\#o)$

STR 3  $\text{♩}$   $-43c$   $-27c$   
 $(\#o)$   $\#o$

STR 4  $\text{♩}$   $+50c$   $-33c$   
 $(\flat o)$   $\#o$

8'

9'

PERC 1 ||

PERC 2 ||

PF 1  $\sharp 0_c$

PF 2  $\sharp 0_c$

GTR 1  $-25_c$

GTR 2  $-27_c$   
( $\sharp 0_c$ )

STR 1  $-28_c$

STR 2  $-27_c$

STR 3  $-27_c$   
( $\sharp 0_c$ )

STR 4  $-23_c$

9'

10'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
(#0)

PF 2  $\pm 0c$   
(#0)

GTR 1  $-25c$   
(#0)  $-9c$   
#0

GTR 2  $-27c$   
(#0)

STR 1  $-15c$   
#0

STR 2  $-27c$   
(#0)  $-16c$   
#0

STR 3  $-27c$   
(#0)

STR 4  $-23c$   
(#0)

10'

17'

PERC 1 ||

PERC 2 ||

PF 1  $\sharp$   $\pm 10c$   
( $\sharp 0$ )

PF 2  $\sharp$   $\pm 10c$   
( $\sharp 0$ )

GTR 1  $\sharp$   $-9c$   
( $\sharp 0$ )

GTR 2  $\sharp$   $-2c$   
( $\sharp 0$ )

STR 1  $\sharp$   $+3c$   
( $\sharp 0$ )

STR 2  $\sharp$   $-16c$   $+5c$   
( $\sharp 0$ )

STR 3  $\sharp$   $-7c$   
( $\sharp 0$ )

STR 4  $\sharp$   $-2c$   
( $\sharp 0$ )

11'

12'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0_c$   
(#0)

PF 2  $\pm 0_c$   
(#0)

GTR 1  $+19_c$   
(#0)

GTR 2  $-2_c$   
(#0)

STR 1  $+3_c$   
(#0)

STR 2  $+5_c$   
(#0)

STR 3  $+7_c$   
(#0)

STR 4  $-2_c$   
(#0)

12'

13'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0_c$   
(#0)

PF 2  $\pm 0_c$   
(#0)

GTR 1  $+19_c$   
(#0)

GTR 2  $+20_c$   
#0

STR 1  $+3_c$   
(#0)

STR 2  $+5_c$   
(#0)

STR 3  $+7_c$   
(#0)

STR 4  $+23_c$   
#0

Detailed description: This is a handwritten musical score for a 12-minute piece. It features ten staves. The first two are for Percussion (PERC 1 and PERC 2), each with a double bar line at the start. The next four are for Piano (PF 1 and PF 2) and Guitar (GTR 1 and GTR 2), all in treble clef. The last four are for String quartet (STR 1, STR 2, STR 3, STR 4), also in treble clef. Each string staff has a specific fretting instruction: STR 1 (+3c), STR 2 (+5c), STR 3 (+7c), and STR 4 (+23c). The piano and guitar staves have a sharp sign with a circled zero (#0) at the beginning. The guitar and string staves have a sharp sign with a circled zero (#0) at the beginning, and a circled zero with a plus sign and a number (e.g., +20c) above it. All staves have a long horizontal line drawn across them, indicating a sustained note or a specific performance instruction. The score is framed by a vertical line on the left and a vertical line on the right, with arrows at the end of each staff pointing to the right.

13'

14'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
(#0)

PF 2  $\pm 0c$   
(#0)

GTR 1  $+19c$   
(#0)

GTR 2  $+20c$   
(#0)

STR 1  $+27c$   
(#0)

STR 2  $+35c$   
(#0)

STR 3  $+23c$   
(#0)

STR 4  $+23c$   
(#0)

Detailed description: This is a handwritten musical score for a 14-measure section. It features ten staves. The first two are for Percussion (PERC 1 and PERC 2), both marked with a double bar line. The next two are for Piano (PF 1 and PF 2), each starting with a treble clef, a sharp sign, and a circled note with a plus sign and a circled 'c' (e.g.,  $\pm 0c$ ). The next two are for Guitar (GTR 1 and GTR 2), each starting with a treble clef, a sharp sign, and a circled note with a plus sign and a circled 'c' (e.g.,  $+19c$ ). The final four are for String quartet (STR 1-4), each starting with a treble clef, a sharp sign, and a circled note with a plus sign and a circled 'c' (e.g.,  $+27c$ ). All string staves have a circled note on the first staff line. The notes are connected by horizontal lines across the measures.



14'

15'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0_c$   
(#0)

PF 2

GTR 1  $+19_c$   
(#0)

GTR 2  $-48_c$   
(#0)

STR 1  $+27_c$   
(#0)

STR 2  $+35_c$   
(#0)

STR 3  $+23_c$   
(#0)

STR 4  $+23_c$   
(#0)

Detailed description: This is a handwritten musical score for a 14-measure section. It features eight staves. The top two staves are for Percussion 1 and Percussion 2, each with a double bar line at the start and a long horizontal line with an arrow at the end. The next two staves are for Piano 1 and Piano 2. Piano 1 starts with a treble clef, a sharp sign, and a circled '0', with a tempo marking of  $\pm 0_c$  above it. A long horizontal line with an arrow at the end is drawn across this staff. Piano 2 is empty. The next two staves are for Guitar 1 and Guitar 2. Guitar 1 starts with a treble clef, a sharp sign, and a circled '0', with a tempo marking of  $+19_c$  above it. A long horizontal line with an arrow at the end is drawn across this staff. Guitar 2 is empty until the 15th measure, where it has a sharp sign, a circled '0', and a tempo marking of  $-48_c$  above it, with an arrow pointing to the right. The bottom four staves are for String 1, 2, 3, and 4. Each starts with a treble clef, a sharp sign, and a circled '0', with tempo markings of  $+27_c$ ,  $+35_c$ ,  $+23_c$ , and  $+23_c$  above them respectively. Long horizontal lines with arrows at the end are drawn across each of these staves.

15'

16'

PERC 1 ||

PERC 2 ||

PF 1  $\text{♩}$

PF 2  $\text{♩}$

GTR 1  $\text{♩}$  +47c  
#0

GTR 2  $\text{♩}$  -48c  
(#0)

STR 1  $\text{♩}$  -46c  
#0

STR 2  $\text{♩}$  +35c  
(#0) +49c  
#0

STR 3  $\text{♩}$  +40c  
#0 -43c  
#0

STR 4  $\text{♩}$  +48c  
#0

16'

17'

PERC 1 II

PERC 2 II

PF 1  $\text{C}$

PF 2  $\text{C}$

GTR 1  $\text{C}$  +47c  
(#0)

GTR 2  $\text{C}$  -48c  
(#0)

STR 1  $\text{C}$  -46c  
(#0)

STR 2  $\text{C}$  +49c  
(#0)

STR 3  $\text{C}$  -43c  
(#0)

STR 4  $\text{C}$  +48c  
(#0)

The score consists of eight staves. Percussion 1 and 2 have wavy lines. Piano 1 and 2 are empty. Guitar 1 has a note at +47c and -43c. Guitar 2 has a note at -48c. String 1 has a note at -46c. String 2 has a note at +49c and -43c. String 3 has a note at -43c. String 4 has a note at +48c.

17'

18'

PERC 1 ||

PERC 2 ||

PF 1  $\text{♩}$

PF 2  $\text{♩}$   $\pm 0c$   
 $\text{h}_0$

GTR 1  $\text{♩}$   $-43c$   
 $\text{h}_0$   $-27c$   
 $\text{h}_0$

GTR 2  $\text{♩}$   $-48c$   
 $\text{h}_0$

STR 1  $\text{♩}$   $-46c$   
 $\text{h}_0$

STR 2  $\text{♩}$   $-43c$   
 $\text{h}_0$

STR 3  $\text{♩}$   $-43c$   
 $\text{h}_0$

STR 4  $\text{♩}$   $-35c$   
 $\text{h}_0$

Detailed description: This is a handwritten musical score for a rehearsal mark. It consists of ten staves. The first two staves are for Percussion (PERC 1 and PERC 2), both marked with a double bar line. The next two staves are for Piano (PF 1 and PF 2), both in treble clef. The PF 2 staff has a starting pitch of  $\pm 0c$  and  $\text{h}_0$ . The next four staves are for Guitar (GTR 1 and GTR 2) and String Quartet (STR 1, STR 2, STR 3, and STR 4), all in treble clef. Each of these four staves has a starting pitch indicated in cents (e.g.,  $-43c$ ) and a starting pitch class ( $\text{h}_0$ ). The GTR 1 staff also has a second pitch class  $-27c$  indicated further down the staff. The staves contain wavy lines representing pitch contours over time.

18'

19'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
 $h_0$

PF 2  $\pm 0c$   
 $(h_0)$

GTR 1  $-27c$   
 $(h_0)$

GTR 2  $-21c$   
 $h_0$

STR 1  $-24c$   
 $h_0$

STR 2  $-27c$   
 $h_0$

STR 3  $-43c$   
 $(h_0)$   $-24c$   
 $h_0$

STR 4  $-35c$   
 $(h_0)$   $-23c$   
 $h_0$

19'

20'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0c$   
(40)

PF 2  $\pm 0c$   
(40)

GTR 1  $-27c$   
(40)

GTR 2  $-21c$   
(40)

STR 1  $-24c$   
(40)

STR 2  $-7c$   
(40)

STR 3  $-24c$   
(40)  $-12c$   
(40)

STR 4  $-23c$   
(40)  $-15c$   
(40)

20'

21'

PERC 1 II

PERC 2 II

PF 1  $\text{♩}$   $\begin{pmatrix} \pm 0c \\ 40 \end{pmatrix}$

PF 2  $\text{♩}$   $\begin{pmatrix} \pm 0c \\ 40 \end{pmatrix}$

GTR 1  $\text{♩}$   $\begin{matrix} -5c \\ 40 \end{matrix}$

GTR 2  $\text{♩}$   $\begin{matrix} -6c \\ 40 \end{matrix}$

STR 1  $\text{♩}$   $\begin{matrix} -6c \\ 40 \end{matrix}$

STR 2  $\text{♩}$   $\begin{pmatrix} -7c \\ 40 \end{pmatrix}$

STR 3  $\text{♩}$   $\begin{pmatrix} -12c \\ 40 \end{pmatrix}$

STR 4  $\text{♩}$   $\begin{matrix} -4c \\ 40 \end{matrix}$

Detailed description: This is a handwritten musical score for a rehearsal mark. It consists of nine staves. The first two are for Percussion 1 and 2, both marked with a double bar line. The next three are for Piano 1 and 2, and Guitar 1 and 2. The final four are for String 1, 2, 3, and 4. Each string staff has a specific tuning or capo position indicated by a number and a letter 'c' (e.g., -5c, -6c, -7c, -12c, -4c) above a '40' on the staff. The piano and guitar staves also have a '40' on the staff. The score is written in a simple, sketchy style with horizontal lines and some wavy lines representing notes or dynamics.

21'

22'

PERC 1 ||

PERC 2 ||

PF 1  $\pm 0_c$   
(40)

PF 2  $\pm 0_c$   
(40)

GTR 1  $-5_c$   
(40)

GTR 2  $-6_c$   
(40)

STR 1

STR 2  $-7_c$   
(40)

STR 3  $\pm 0_c$   
(40)

STR 4  $-4_c$   
(40)

Detailed description: This is a handwritten musical score for a 22-minute piece. It features ten staves. The first two are for Percussion 1 and Percussion 2, each with a double bar line at the start. The next four are for Piano (PF 1 and PF 2), Guitar (GTR 1 and GTR 2), and String quartet (STR 1, STR 2, STR 3, STR 4). Each of these four instrument groups has a treble clef and a common time signature (C). Handwritten notes above the first few staves indicate specific fretting or techniques:  $\pm 0_c$  for Pianos,  $-5_c$  for Guitar 1,  $-6_c$  for Guitar 2,  $-7_c$  for String 2, and  $-4_c$  for String 4. Below the first few staves, there are circled numbers: (40) for PF 1, (40) for PF 2, (40) for GTR 1, (40) for GTR 2, (40) for STR 2, (40) for STR 3, and (40) for STR 4. The notation consists of horizontal lines with some wavy lines underneath, possibly representing sustained notes or tremolos.



22'

23'



PERC 1 II

PERC 2 II

PF 1  $\text{C}$

PF 2  $\text{C}$

GTR 1  $\text{C}$

GTR 2  $\text{C}$

STR 1  $\text{C}$

STR 2  $\text{C}$

STR 3  $\text{C}$

STR 4  $\text{C}$