

# **Faith in Numbers**

**concerto for violin with percussion quartet**

**Taylor Brook**

**2010**

# concert notes

This violin concerto is dedicated to violinist, Mira Benjamin.

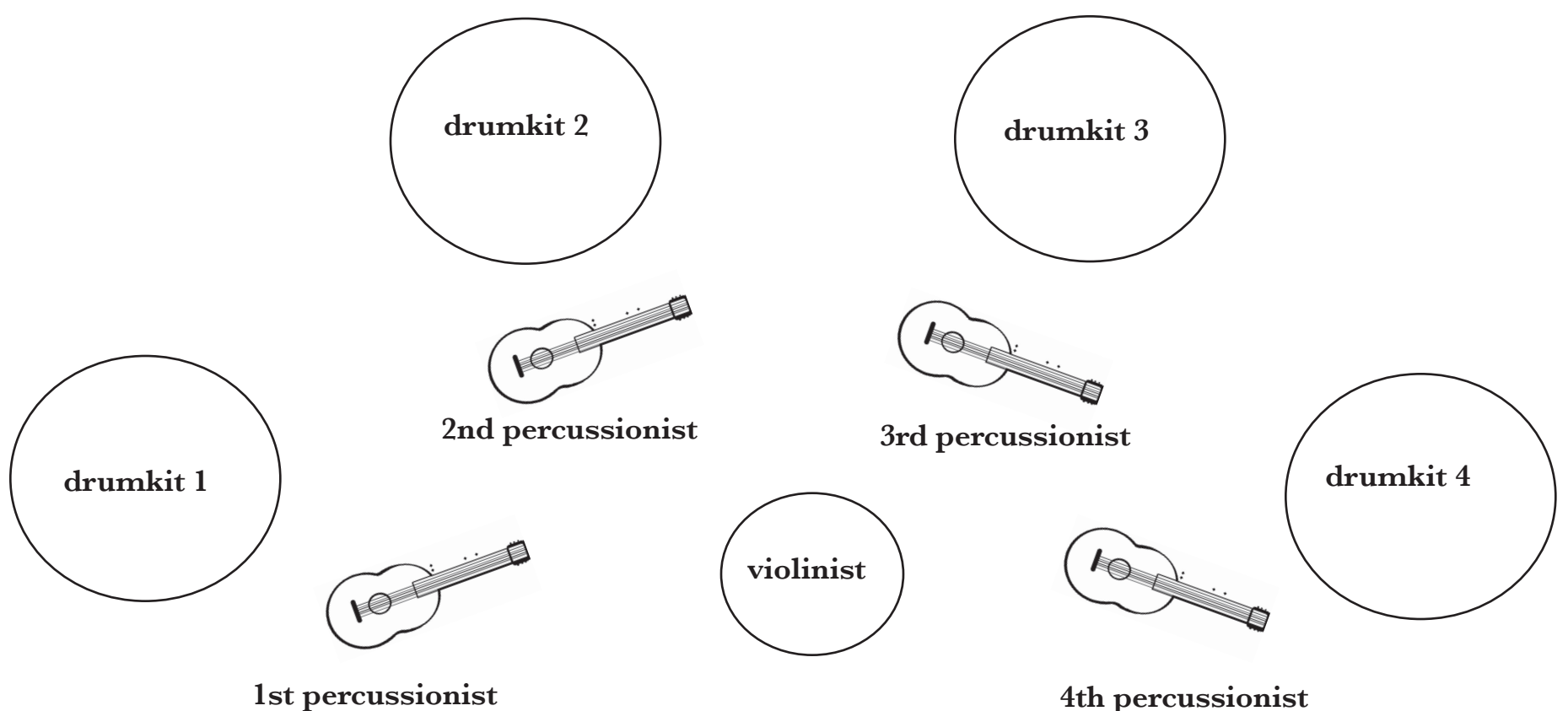
The title, *Faith in Numbers*, is taken from a popular science documentary by James Burke of the same name, which shows how technology emerges from seemingly unconnected events in history. This title doesn't refer to faith in a religious sense, but to signify a complete trust in something or someone. I chose this title for my composition because of the utilization of the same basic proportions in all structural levels. By doing this, the reiteration of simple numbers and ratios, applied to different aspects of the composition, combine to form a complex whole.

The third and fourth strings of the violin are retuned: the G string is tuned down a sixth of a tone, and the D string is tuned up a quarter-tone. This microtonal scordatura transports the treatment of pitch in the music to the resonance of the instrument itself. In this way, my ideas about pitch inform how I want to tune the violin, then the retuned violin informs me about how I want to use pitch in the composition. The open strings define the important tonal centres of the work as well as the construction of the modes, which are drawn from the first seven harmonics of the opens strings.

The percussion quartet perform on a drum kit, two almglocken and a steel string guitar. The guitar is played primarily with mallets while secured on its back to a table. By using the guitar as a percussion instrument I am tipping my hat to Lou Harrison and the use of a double bass in his violin concerto, which uses a percussion quintet instead of an orchestra. Each of the guitars is tuned to a different open chord, corresponding to the pitch of one of the open violin strings.

## staging

The stage should be set up as shown in the diagram below, with the guitars and drum kits as two separate stations for the percussionists to play from. The guitars should be as close to the violin as is comfortable, while the drum kits should be spaced further away from the violin and each other. Each guitar must be secured on its back to a table covered in foam or some other material to both protect the guitar as well as prevent the sound of the guitar hitting against the table.



# microtonality and just intonation

The microtones that saturate this work are used to approximate just intervals, therefore small adjustments should be made by ear to play these intervals perfectly in tune. I advise the soloist to develop a sense of tonal centre and mode throughout the work in order to obtain the most precise and sensitive tuning.

The following accidental nomenclature is also used to approximate exact pitches:

♭ - ♯ approximately 1/4 tone flat or sharp  
↓ - ↑ approximately 1/6 tone flat or sharp  
♭ - ♭ - ♯ - ♯ - ♯ - ♯ approximately 1/12 tone flat or sharp

The accidentals showing the twelfth-tone (one sixth of a semitone) alterations should be thought of as extremely small inflections of the pitch. This minute alteration in pitch equals the difference between the just major third (the fourth harmonic, accessible on any string or brass instrument) and the equal temperament major third. In other words, it is best to treat the notes with these accidentals as if they required a slight inflection for the sake of good tuning.

The sixth-tone (one third of a semitone) alteration equals the difference between the seventh harmonic and the equal temperament minor seventh. In other words, the seventh harmonic is a sixth-tone flat of the equal temperament minor seventh. This difference may be demonstrated by sounding the seventh harmonic on the fourth string of the violin; the pitch of this harmonic will be a sixth-tone flat of an equal temperament F.

The quarter-tone alteration should be precisely halfway between the equal tempered pitches. The quarter-tone alteration can be heard at the 11th partial of the harmonic series, which is exactly halfway between the perfect fourth and the tritone.

## general notation

dotted line - Signifies a gradual change from the marking at the beginning of the dotted line to what is marked at the end. The dotted line is used both for tempo changes as well as playing techniques. For example, if you find in your part an “ord” marked with a dotted line leading to “alto sul tasto” then it should be executed as a gradual movement of the bow from the ordinary playing position to the alto sul tasto position for the duration between the beginning of the dotted line and the end.

Grace notes with a line through the stem should be played before the beat.

Glissandi must be performed for the entire duration of the note.

∅ - niente - (A dynamic approaching silence.)

⊖ - dampen symbol



# notation for percussion quartet

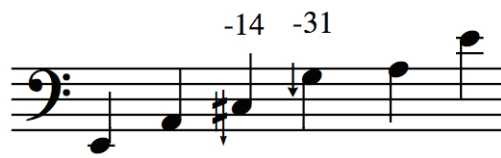
## instruments:

This composition calls for the following instruments to be played by the percussion quartet:

### percussion 1:

2 almglocken (A3 and E4)  
retuned steel-string guitar  
3 tom-toms  
2 suspended cymbals  
kick drum  
various mallets and a cello bow

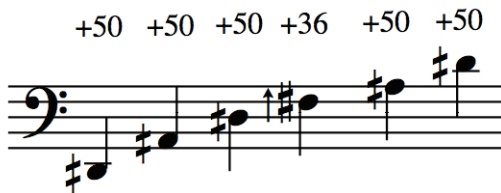
### guitar 1 tuning



### percussion 2:

2 almglocken (E4 and B4)  
retuned steel-string guitar  
3 tom-toms  
2 suspended cymbals  
kick drum  
various mallets and a cello bow

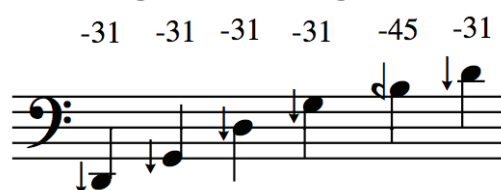
### guitar 2 tuning



### percussion 3:

2 almglocken (C#4 and G#4)  
retuned steel-string guitar  
3 tom-toms  
2 suspended cymbals  
kick drum  
various mallets and a cello bow

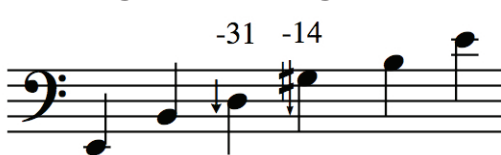
### guitar 3 tuning



### percussion 4:

2 almglocken (B3 and F#4)  
retuned steel-string guitar  
3 tom-toms  
2 suspended cymbals  
kick drum  
various mallets and a cello bow

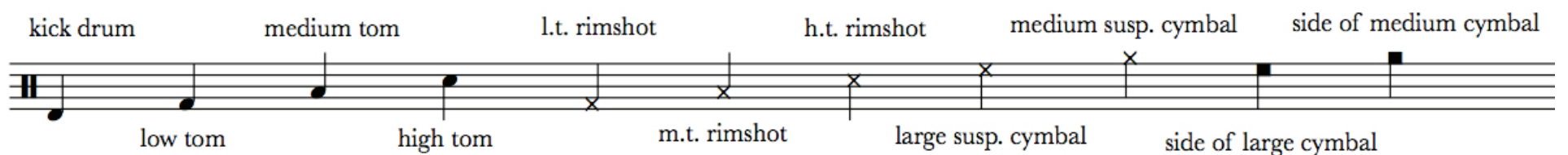
### guitar 4 tuning



## drum kits:

The 3 tom-toms, 2 suspended cymbals and kick drum should be assembled as a drum kit for each of the four percussionists. Each set of three toms should have a large, medium and small tom. Furthermore, each of the three sizes of toms and two sizes of cymbals should be tuned from highest to lowest from first to fourth percussion. For example, the large tom of the first percussion is higher in pitch than the large tom of the second percussion, which is higher in pitch than the large tom of the third percussion, etc.

The drum kit is notated in the following manner:



## guitars:

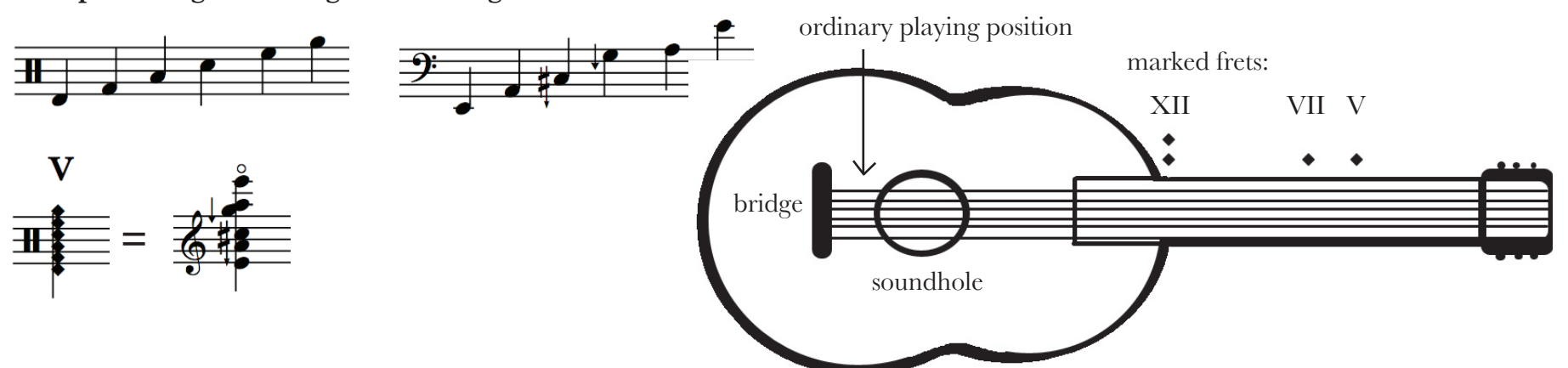
Each percussionist is required to play one steel string guitar as a percussion instrument. The guitars should be strung with high tension steel strings in order to be played most effectively with mallets and bows in the tunings provided above. The numbers given above the microtonal pitches in the tunings signify the deviation of those pitches in cents (hundredths of a semitone) from the nearest equal temperament note. To perform the playing techniques correctly, the guitar must be secured on its back to a table, covered in foam or some other soft material.

I have notated the guitar on a staff with a percussion clef, where each of the six guitar strings corresponds to a space on the staff, including the spaces just above and below the top and bottom lines. For example, the string with the highest pitch is notated in the space above the top line of the staff.

The percussionists are asked to strike the guitar strings with mallets, bow the strings and pluck the strings. Harmonics are also called for in connection with these various modes of excitation. These harmonics are notated as diamond noteheads along with a roman numeral indicating at what fret one must stop the strings in order to produce the correct harmonic. A “slap mute”, where the strings are audibly muted by slapping and holding the fretboard with the left hand is notated with “x” noteheads.

The final section of the work calls for a preparation of the second, third and fourth guitars. This preparation involves placing a chopstick through the strings so that the chopstick goes over the four highest (in pitch) strings, under the fifth string and then over the sixth string. This chopstick should be inserted just below the soundhole. The performer then plays the prepared guitar as before with an added technique of slapping the chopstick, which creates an extended ricochet effect from the chopstick hitting against the upper strings.

### examples using the tuning of the first guitar:





# Faith in Numbers

## Concerto for Violin

Taylor Brook

$\text{♩} = 40$

Violin (sounding)

Violin (transposing)

4/4

s.t.  
II V

*pppp* *ppp* *pppp*

ALMGLOCKEN  
2 two-tone yarn mallets  
top-----bottom

Percussion 1

4/4

*pppp* *p* *ppp* *pp* *ppp*

ALMGLOCKEN  
2 two-tone yarn mallets  
top-----bottom

Percussion 2

4/4

*pppp* *p* *ppp* *pp* *ppp*

ALMGLOCKEN  
2 two-tone yarn mallets  
top-----bottom

Percussion 3

4/4

*pppp* *p* *ppp* *pp* *ppp*

ALMGLOCKEN  
2 two-tone yarn mallets  
top-----bottom

Percussion 4

4/4

*pppp* *p* *ppp* *pp* *ppp*

5

Vln. (sn)

Vln. (tr)

*pp* *pppp* *p* *pppp*

Perc. 1

(bottom)-----top-----bottom

*p* *ppp* *p*

Perc. 2

(bottom)-----top-----bottom

*p* *ppp* *p*

Perc. 3

(bottom)-----top-----bottom-----top

*p* *ppp* *p* *ppp*

Perc. 4

(bottom)-----top

*p* *pppp*

to GUITAR  
(2 two-tone yarn mallets)

$\text{♩} = 48$  (SLIGHTLY FASTER)

8<sup>va</sup>

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

II ord.

I II s.t. ord.

ppp p ppp mp ppp mp

top bottom top bottom top

to GUITAR (2 two-tone yarn mallets)

GUITAR rub\* pppp < pp

ppp p ppp

ppp p ppp

to GUITAR (2 two-tone yarn mallets)

GUITAR rub\* pppp < pp

pppp < pp

to GUITAR (2 two-tone yarn mallets)

GUITAR rub\* pppp < pp

pppp < pp

pppp < pp

13

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

I II I II I II I II III II I II

mp < f

ppp < p > ppp <

3 2 3 2 3 2 3 2

4 4 4 4 4 4 4 4

\* rub the heads of the yarn mallets on the guitar strings to produce a static noise. Each line represents the rubbing of one mallet and the percussionist is free to choose exactly where, and on which strings, to rub.

19

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. I III II s.t. s.v. c.v. p.s.p. I II s.p. III

mp pp mfp mf mfp mf p mf p mf

norm. pppp p ppp mp mp pppp

norm. pppp p ppp mp mp pppp rub pp pp

norm. pppp

23

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. I II III (III) (II) I p.s.p. s.t. III IV ord. s.t. ord.

p f p mp ppp p mp mp p

norm. rub norm.

ppp pp pp pppp

norm. rub

norm. pppp p ppp mp pppp

norm. rub

p ppp mp pppp pp

♩ = 56 (SLIGHTLY FASTER)

26

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

> c.v. --- s.v. (unison) (ord.) --- s.t. p.s.p. s.t. p.s.p.

*f* *p* *mf* *p* *mf* *p* *mf*

to DRUMKIT  
2 wooden drumsticks

DRUMKIT  
(cymbals)

norm. *pppp* *mf*

to DRUMKIT  
4 hard yarn mallets

norm. *pppp* *mf*

to DRUMKIT  
2 wooden drumsticks

DRUMKIT  
(cymbals)

*pppp* *mf* *pp* *f*

*pppp* *mf*

30

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

IV III gliss harmonics 2 ord. 3 4

*p* *mf* *mf* *mp* *fp* *f* *p* *f* *p* *f* *p*

4 hard yarn mallets

to GUITAR  
2 chopsticks

DRUMKIT  
(cymbals)

to GUITAR  
2 chopsticks

DRUMKIT  
(cymbals)

to GUITAR  
2 chopsticks

4 hard yarn mallets

to GUITAR  
2 chopsticks

*mf* *pp* *ff* *pp* *ff* *pp* *ff*

35 **4** **4** **3** **4** **4**

Vln. (sn) *f* *mp* *mf* *p* *mf* *mp* *f* *p*

Vln. (tr) *f* *mp* *mf* *p* *mf* *mp* *f* *p*

*c.v.---s.v.* *I II* *II I II* *s.t.---ord.* *c.v.---s.v.* *c.v.---s.v.* *II I 6 II I II III*

*(ord.)---s.p.---ord.*

39 **4** **4** **3** **4** **4**

Vln. (sn) *mp* *mf* *fp* *mf* *fp* *f* *fp* *ff* *mf* *ff* *f* *fff* *ff*

Vln. (tr) *mp* *mf* *fp* *mf* *fp* *f* *fp* *ff* *mf* *ff* *f* *fff* *ff*

*s.p.---ord.* *s.p.---ord.* *(ord.)---poco s.p.* *pizz. II s.t. arco*

43 **4** **4** **3** **4** **4**

Vln. (sn) *p* *mp* *pp* *mp* *mf* *fp* *f*

Vln. (tr) *p* *mp* *pp* *mp* *mf* *fp* *f*

*♩ = 66 (SLIGHTLY FASTER)*

**4** **3** **4** **4**

Perc. 1 *mp*

**4** **3** **4** **4**

Perc. 2 *mp*

**4** **3** **4** **4**

Perc. 3 *mp*

**4** **3** **4** **4**

Perc. 4 *mp*

**GUITAR**  
V→  
ricochet\*

\* The ricochet on guitar strings should be a long bounce with a squelch-type noise at the end. This may be produced by striking the string with a loose grip and allowing the chopstick to bounce freely.

47

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

s.t. ord. s.t. s.p. ord.

*pp* *mf* *p* *f* *p*

3/4 3/4 3/4 3/4 3/4

4/4 4/4 4/4 4/4 4/4

mf p p mp

p mf p mp mf

p mf mp

2 two-tone yarn mallets

mf

51

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

(ord.) s.t. s.p. p.s.p.

*f* *p* *f* *p* *fp* *mf* *p*

2 two-tone yarn mallets

2 two-tone yarn mallets

2 two-tone yarn mallets

*pppp* *mf* *ppp* *mp* *pppp*

4/4 4/4 4/4 4/4 4/4 4/4

mf

pppp mf ppp mp pppp



Vln. (sn)  
Vln. (tr)

61

a.s.p.---ord.---s.p. (s.p.)---ord. ord.---a.s.p. (a.s.p.)---ord. poco s.p.---ord.---s.p.

*mf* *f* *mp* *mp* *mf* *mp* *ff* *mf* *f*

to ALMGLOCKEN  
2 two-tone yarn mallets

ALMGLOCKEN  
top

Perc. 1  
Perc. 2  
Perc. 3  
Perc. 4

Vln. (sn)  
Vln. (tr)

65

poco s.p. ord. ord.---s.p.---s.t. (unison)

*mf* *ff* *ff* *ff* *f* *ff* *fp* *ff* *p* *mp* *ppp*

(top)---bottom---top (top)---bottom---

to ALMGLOCKEN  
2 two-tone yarn mallets

ALMGLOCKEN  
top

(top)---bottom---top bottom---top

to ALMGLOCKEN  
2 two-tone yarn mallets

ALMGLOCKEN  
top

Perc. 1  
Perc. 2  
Perc. 3  
Perc. 4

69

Vln. (sn)

Vln. (tr)

(s.t.)

15<sup>ma</sup>

I ord.

*mp* *pp* *mp* *pp* *mp* *ppp* *mp*

Perc. 1

top (top)-----bottom-----top (top)-----bottom

*pp* *mp* *pp* *mp* *pp*

Perc. 2

(top)-----bottom-----top (top)-----bottom

*mp* *pp* *mp* *pp*

Perc. 3

(top)-----bottom-----top (top)-----bottom

*mp* *pp* *mp* *pp*

Perc. 4

to ALMGLOCKEN  
2 two-tone yarn mallets

ALMGLOCKEN  
top

(top)-----bottom

*ppp* *mp* *pp*

II ♩ = 56

75

Vln. (sn)

Vln. (tr)

ord.-----s.t.-----vib.-----c.v.-----vib.-----s.v.-----a.s.t.

(unison)

*ppp* *mp* *mf* *pp* *p* *mf* *pp* *pp* *pppp* *mp*

to DRUMKIT  
2 wooden drumsticks

DRUMKIT \*

*pppp* *ff* *<ff*

to GUITAR  
2 medium-light dowels

GUITAR  
near bridge-----norm.

*pp* *ff*

to DRUMKIT  
2 wooden drumsticks

DRUMKIT \*

*pppp* *ff* *<ff*

to DRUMKIT  
2 wooden drumsticks

DRUMKIT \*

*pppp* *ff* *<ff*

3 4 3 2 5  
4 4 4 4 8

\* These grace note clusters should be performed as fast as possible and before the beat. Furthermore, the grace notes of one percussionist should not coincide precisely with the grace notes of the other percussionists.

85  $\text{♩} = 74$

Vln. (sn) 5 3 4 4 2 3

Vln. (tr) 5 3 IV a.s.t. s.p. III c.v. ord. II III vib. s.v. III (unison) s.v. m.v. (unison) vib.

*mf* *mp* *f* *mp* *f* *p* *f* *ff* *p*

92 ACCEL  $\text{♩} = 92$

Vln. (sn) 3 4 3 4

Vln. (tr) 3 III s.t. ord. 4 ord. s.p. (s.p.) ord. 3 4

*mp* *f* *mp* *mf* *p* *f* *pp* *p* *mp* *p* *f*

99

Vln. (sn) 4 3 4 3

Vln. (tr) 4 3 c.v. s.v. (unison) 4 III c.v. s.v. 3 II \* III s.p. 3 II III ord. (unison)

*p* *f* *p* *mf* *p* *ff* *mf* *ppp* *pp* *mf* *p*

to GUITAR 1 medium-light dowels  $\text{♩} = 74$  GUITAR XII

Perc. 1 *pp* *mf* *ff*

Perc. 2 (dowel) XII VII XII V *ff* *f* *ff* *ff*

Perc. 3 to GUITAR 1 medium-light dowels *pp* *mf*

Perc. 4 to GUITAR 1 medium-light dowels *pp* *mf*

\* slide up to the A (written A<sub>d</sub>) extremely gradually, immediately releasing the note when the A is reached.

♩ = 100 (SLIGHTLY FASTER)

106

Vln. (sn) *mf* *mf* *p* *mf* *p* *mf* *p* *mf* *p* *mf* *p* *f*

Vln. (tr) (unison) III c.v. --- s.v. flautando II III norm. III

Perc. 1 V *mf* *f* *mf*

Perc. 2 XII XII *f* *f* *mf*

Perc. 3 GUITAR V *mf* *f* *mf*

Perc. 4 GUITAR V *f* *mf*

to ALMGLOCKEN  
2 two-tone yarn mallets  
near bridge

ACCEL ----- ♩ = 112

115

Vln. (sn) *ffp* *ff* *p* *mp* *mf* *p* *f* *mp*

Vln. (tr) III → (ord.) c.v. --- s.v. s.p. --- ord.

Perc. 1 ALMGLOCKEN *p* *ppp*

Perc. 2 norm. *mp* *ppp*

Perc. 3 to DRUMKIT 2 wooden drumsticks *mp*

Perc. 4 to DRUMKIT 2 wooden drumsticks *mp*

122 **4/4** **3/4**

Vln. (sn) **4/4** **3/4**

Vln. (tr) **4/4** **3/4**

Perc. 1 **4/4** **3/4**

Perc. 2 **4/4** **3/4**

Perc. 3 **4/4** **3/4**

Perc. 4 **4/4** **3/4**

*fp* *f* *f* *mf* *ff* *mp*

II I II I II (II)

dowel with moleskin XII XII XII XII V XII XII XII XII V

*f* *p* *mf* *p* *mf* *f* *p* *mf* *p* *mf*

*<mf* *<f* *<p* *<mp* *<mf* *<f* *<p* *<mp* *<mf*

$(\text{♩} = \text{♩}) \text{♩} = 84$

129 **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

Vln. (sn) **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

Vln. (tr) **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

Perc. 1 **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

Perc. 2 **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

Perc. 3 **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

Perc. 4 **3/4** **4/4** **3/4** **4/4** **3/4** **4/4**

*ffp* *fp* *ff* *f* *mf*

s.p. ord. s.p. ord. (unison)

XII XII XII XII VII V XII XII XII XII

*f* *p* *mf* *p* *mf* *f* *p* *mf* *p*

*<f* *<p* *<p* *<mp* *<mf* *<f*

$\text{♩} = 126$

134

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. s.p.

*f* *mp* *f* *mp*

*mf* *p* *mf* *f* *mf* *p* *mf* *f* *p*

*p* *mp* *mf* *f* *p* *mf*

*p* *mp* *mf* *f* *p* *mf*

to DRUMKIT  
2 wooden drumsticks

POCO ACCEL  $\text{♩} = 136$

140

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. s.p.

*f* *p* *mp* *f* *mf* *f* *mp* *f* *mp*

*mf* *p* *mf* *f* *p* *mf* *p* *mf* *f* *p*

*mp* *f* *p* *p* *mp* *mf* *f*

*mp* *f* *p* *p* *mp* *mf* *f*

DRUMKIT

146

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mf* > *mp* *f* > *mp* *f* *mp*

ord. s.p.

*p* > *mf* *sub p* *mp* < *mf*

XII XII V XII XII V XII XII XII XII

*mf* *p* *mf* *f* *p* *mf* *p* *mf* *f* *p*

*p* > *mf* *sub p* *mp* < *mf*

*p* > *mf* *sub p* *mp* < *mf*

( $\overset{3}{\bullet}$  = ♩) = 102

152

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. *fp* *f* *f*

*mp* < *mp* < *mf* < *f*

XII XII V XII XII XII XII V

*mf* *p* *mf* *f* *p* *f* *p* *mf*

*mp* < *mp* < *mf* < *f*

*mp* < *mp* < *mf* < *f*

2/4 4/4 2/4 4/4

$(\text{♩}=\text{♩}) = 153$

156

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

$(\text{♩}=\text{♩}) = 102$

$(\text{♩}=\text{♩}) = 153$

161

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

(ord.)---s.p.---ord.

I II IV III (unison)

IV→

167

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*fp*

*p* *f* *<p* *<mp*

XII XII V XII XII V XII XII V XII XII V

*f* *p* *mf* *f* *p* *f* *p* *mf* *f* *p* *mf*

*p* *f* *<p* *<mp*

*p* *f* *<p* *<mp* *<mf*

171

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*ff* *fp* *ff*

*<mf* *f* *<mp* *<mf* *<f* *mp* *mf*

XII XII XII XII V XII XII V XII XII V XII XII V

*f* *p* *f* *p* *mf* *f* *p* *f* *p* *mf* *f* *p* *f* *p* *mf*

*<mf* *f* *<mp* *<mf* *<f* *mp* *mf*

*f* *<mp* *<mf* *<f* *mp* *mf*

(♩ = ♪) = 115

ACCEL

Vln. (sn) 4/4

Vln. (tr) 4/4

ffp *f* > *mp* *f* *mp* *f* *mp* *ff* *mf* *f* *mp*

ord. s.p. III II I II I

Perc. 1 4/4 to ALMGLOCKEN 2 two-tone yarn mallets *f* ALMGLOCKEN *mp*

Perc. 2 4/4 2 medium-light dowels *f* ALMGLOCKEN *ff*

Perc. 3 4/4 to ALMGLOCKEN 2 two-tone yarn mallets *f* ALMGLOCKEN *mp*

Perc. 4 4/4 to ALMGLOCKEN 2 two-tone yarn mallets *f* ALMGLOCKEN *mp*

♩ = 138

Vln. (sn) 4/4 (8va) 180

Vln. (tr) 4/4

Perc. 1 *sfz*

Perc. 2 *sfz*

Perc. 3 *sfz*

Perc. 4 *sfz*

(8<sup>va</sup>)

181

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*sfz*

*ff*

*mp*

*ff*

*sfz*

*ff*

*ff*

*mp*

*ff*

*ff*

*mp*

*ff*

ACCEL

♩ = 160

188

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

(ord.)

s.p.

ord.

*fp*

*f*

*fff*

*ffp*

*p*

*fff*

to GUITAR  
take bow

to GUITAR  
take bow

to GUITAR  
take bow

III II



(♩ = ♩) ♩ = 80

201

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. s.p. ord. s.p. ord. s.t. s.t. ord. s.p.

*f mp f mp f ff p fff*

V VII to DRUMKIT 2 wooden drumsticks

XII VII

IV to DRUMKIT 2 wooden drumsticks

IV XII to DRUMKIT 2 wooden drumsticks

(♩ = ♩) ♩ = 107

(♩ = ♩) ♩ = 160

206

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

I ord. II →

*mf mp f*

DRUMKIT

DRUMKIT

DRUMKIT

DRUMKIT

*<mp <mf <f <p <mp <mf <p <mp <mf <f <pp <p*

VII XII VII V IV

212

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

217

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4







252 **3** **4**

Vln. (sn) **4** **4**

Vln. (tr) **3** **4** **4**

Perc. 1 **3** **4** DRUMKIT

Perc. 2 **3** **4** DRUMKIT

Perc. 3 **3** **4**

Perc. 4 **3** **4**

256

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2 bell-----bow

Perc. 3 bell-----bow

Perc. 4

260

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mp* *f* *mp* *mf* *f* *p* *ff* *mp* *ff*

bell ----- bow  
*fp* ----- *ff*

edge ----- centre

edge ----- centre

edge -----

265

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

edge ----- centre

bell ----- bow

bell ----- bow

bell ----- bow

centre

edge ----- centre

bell ----- bow

*mp* *ff* *p* *ff* *p* *ff* *p* *ff* *p* *ff* *p* *ff*

IV *p*

# III ♩ = 40

Vln. (sn)  
Vln. (tr)

*mp pp mp pp mp pp mp pp*

Vln. (sn)  
Vln. (tr)

*mp > p mf mfp mf pp mp > pp > mp > p mf p*

to GUITAR  
to ALMGLOCKEN  
2 hard yarn mallets  
ALMGLOCKEN  
top bottom  
to GUITAR  
to ALMGLOCKEN  
2 two-tone yarn mallets  
GUITAR  
plucked  
V  
GUITAR  
plucked  
XII  
ALMGLOCKEN

*mp pppp pp mp mp mp p*

Vln. (sn)  
Vln. (tr)

*ff sub p pp mp pp mp pp mp pp*

Perc. 1  
Perc. 2  
Perc. 3  
Perc. 4

*mp mf mp mf mp mp p*

293

Vln. (sn) *mp* *pp* *mf* *pp* *mf* *mp* *f*

Vln. (tr) *mp* *pp* *mf* *pp* *mf* *mp* *f*

Perc. 1 *mf mp* *mf* *mp*

Perc. 2 *pp* *pppp* *pp* *pppp* *pp*

Perc. 3 *mf mp* *mf* *mp* 2 dowels with moleskin

Perc. 4 *mp p* *mp* *p*

298

Vln. (sn) *p* *pp* *mp* *fp* *f* *pp*

Vln. (tr) *p* *pp* *mp* *fp* *f* *pp*

Perc. 1 *mp* *mp* *mp*

Perc. 2 *pppp* *pp* *pppp*

Perc. 3 *pppp* *pp* *mp* *pppp*

Perc. 4 *pppp* *pp* *p* *pppp*

303

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mf* *fp* *f* *p* *mp* *p*

(ord.)-----p.s.p.

I → ord.

VII XII

bottom top bottom top

(discard bow) plucked XII

wooden end

307

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mf* *f* *mp* *f* *p* *f* *pp*

I → s.v.-----wide vib.---s.v.

III IV V XII  
s.p.-----ord.---s.p.

bottom top bottom top bottom

V

s.p.-----ord.---s.p.

top-----bottom

311

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

316

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

321

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. s.p. c.v. s.v. ord. ord. p.s.p.

*f* *p* *ff* *p* *f* *mf* *ff* *mp* *f*

V XII XII VII V IV V bow

(wooden end) bottom top bottom top bottom to GUITAR bow

near bridge XII XII XII bow

bottom (wooden end) top bottom top bottom to GUITAR bow

327

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. c.v. s.v. s.t. s.p. ord. ord. s.p.

*mp* *p* *mf* *p* *f* *fp* *f* *mp* *pp* *f*

arco V arco V V

334

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. (ord.) s.p. ord. s.p. ord. s.p.

*p* *f* *p* *mf* *p* *fp* *fp*

IV

GUITAR IV arco

ppp

*mf*

IV

GUITAR arco V

ppp

*mf*

342

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

ord. s.p. ord. s.p. ord. s.p. ord. s.p.

*fp* *fp* *fp* *fp*

IV

ppp

*mf*

V

ppp

*mf*

IV

ppp

*mf*

IV

ppp

*mf*





374

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

(exact strings approximate)

*f* *ff* *mf*

(double strokes)

(exact strings approximate)

*ff* *mf*

arco

*ppp*

3/4 4/4 3/4 4/4

378

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

p.s.p.

*f* *ffp* *ff*

V → I

arco

*pp*

4/4 4/4 4/4 4/4

382

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*ff* *ffp* *ffp* *fff*

*f* *ff* *ff*

*p* *f*

*ff* *ff*

386

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*pp* *ff*

*ff* *ff* *ff*

*ff* *ff*

389

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*ff* *ffp* *ff*

IV

*ppp*

392

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*ff*

I I II I  
II 6 III

V

*ppp*

395

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*ffp* — *ff*

*ff*

*fp* — *f* — *fp*

*ppp* — *f* — *fp*

*fp*

398

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*fp* — *ff* — *ffp* — *ffp* — *ffp*

*ppp* — *ffp*

*ff* — *p*

*ff* — *p*

*ff* — *p*

V

401

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

404

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4



417

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mf*

*mf*

*mf*

*mf*

*ppp*

richochet V

richochet V

richochet V

richochet V

3/4 4/4

3/4 4/4

3/4 4/4

3/4 4/4

norm. slap mute

*f*

421

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*ff*

*f*

*ff*

*f*

*ff*

*f*

slap mute

slap mute

slap mute

slap mute

V V V V V

V V V

425

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

8va

ff

f

pppp

ppp

3/4

2/4

II I III IV II I III IV

hard yarn mallet

429

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

2/4

4/4

pppp

pp

pppp

hard yarn mallet

f

mf

XII VII

XII VII V IV

XII VII

mf

$(\text{♩} = \text{♩}) = 60$

433

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*p* *pppp* *mp* *pppp* *mp* *pppp* *mp* *ppp*

hard yarn mallet

hard yarn mallet

VII V IV XII →

XII →

XII →

XII →

*mf* *mf* *mp* *mp*

438

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mf* *ppp* *mf* *ppp* *mf* *ppp* *mf*

I chopstick

441

Vln. (sn)

Vln. (tr)

*ppp* *mf* *ppp* *mf* *pp* *f* *pp* *f*

Perc. 1

Perc. 2

Perc. 3

Perc. 4

to ALMGLOCKEN  
(PREPARE GUITAR)

to ALMGLOCKEN  
(PREPARE GUITAR)

(PREPARE GUITAR)

445

Vln. (sn)

Vln. (tr)

*pp* *f* *pp* *ff* *mp* *pp* *mp*

Perc. 1

Perc. 2

Perc. 3

Perc. 4

VII

2 chopsticks

*mf*

451

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*pp* *mp* *ppp* *f* *ppp* *ff* *p* *ff*

*15<sup>ma</sup>*

*I*

*c.v. - - s.v.*

*ricochet*  
L.H. R.H.

*1 chopstick*

458

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*mf* *f* *mp* *ff* *ff* *p*

*with lightness and ease*

*with lightness*

$(\text{trill}) = 92$

*VII* *2 chopsticks*

*ALMGLOCKEN*

*GUITAR (prepared)*  
*near bridge*

462

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

465

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

GUITAR (prepared) near bridge (slap)

469

Vln. (sn)

Vln. (tr)

(ord.) - p.s.p.

II I

II (II)<sub>6</sub>

aggressively

s.p.

mf ff sffz

Perc. 1

Perc. 2

Perc. 3

Perc. 4

472

Vln. (sn)

Vln. (tr)

f mf mf < ff fff ff f mp

Perc. 1

Perc. 2

Perc. 3

Perc. 4

476

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

*p* *ff* *mf* *f* *mp* *mf* *f* *f* *mf* *f*

s.p. ord.

479

Vln. (sn)

Vln. (tr)

Perc. 1

Perc. 2

Perc. 3

Perc. 4

2 two-tone yarn mallets

*f* *f* *f* *f*

to ALMGLOCKEN  
2 two-tone yarn mallets

3 4 3 4 3 4 3 4

484

Vln. (sn) 4/4

Vln. (tr) 4/4

Perc. 1 4/4

Perc. 2 4/4

Perc. 3 4/4

Perc. 4 4/4

ord. s.p. m.v. s.v. ord.

*mp* *f* *mp* *f* *p*

ALMGLOCKEN

ALMGLOCKEN

*pppp* *mf*

*pppp* *mf*

*pppp* *mf*

3/4 2/4

489

Vln. (sn) 2/4 3/4 4/4

Vln. (tr) 2/4 3/4 4/4

Perc. 1 2/4 3/4 4/4

Perc. 2 2/4 3/4 4/4

Perc. 3 2/4 3/4 4/4

Perc. 4 2/4 3/4 4/4

*mp* *ppp* *p*

*ppp* *mp* *ppp* *mp* *ppp*

*ppp* *mp* *ppp* *mp* *ppp*

*ppp* *mp* *ppp* *mp* *ppp*

*ppp* *mp* *ppp* *mp* *ppp*

8 8 8 8