

Spasm

For String Quartet

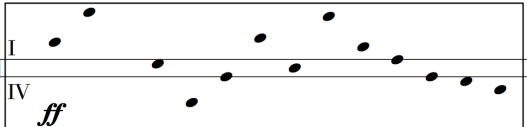
Alejandro Ivan Arreola

Duration: ca. 11'

Performance Notes and Explanations of Symbols and Notations

ca. 2"

intense, chaotic improv., all strings, as fast as possible




The boxed material consisting of stemless noteheads is the contour for players to follow approximately. The roman numerals, I and IV, are the string numbers.

trill as fast as possible

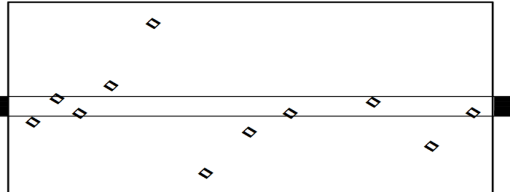
tr

s.p.



The solid line also indicates the contour for the fourth finger during the trill. The line is also approximate.

ca. 5"



Diamond notehead boxes are approached the same way as the boxed material with black noteheads, but with incidental harmonics.

Program Note

For this piece, I was compelled to explore the various physical and psychological characteristics of Benign Fasciculation Syndrome (BFS). Most people experience or know about muscle twitching, however, BFS happens consistently in various parts of the body. I observed the different rhythmic characteristics and translated them into sound while taking the psychological effect into consideration.

String Quartet Spasm

Sporadic, aggressive, and chaotic

Alejandro Ivan Arreola (2019)

The score is divided into four parts, each with a duration of approximately 2 minutes (ca. 2") or 3 minutes (ca. 3").

- Violin I:** Starts with a rest for ca. 2". At the beginning of the section, there is a tempo marking of 60 bpm and a dynamic marking of *f*. The section is marked *ff* and includes the instruction "intense, chaotic improv., all strings, as fast as possible".
- Violin II:** Starts with a rest for ca. 2". The section is marked *ff* and includes the instruction "intense, chaotic improv., all strings, as fast as possible".
- Viola:** Starts with a rest for ca. 2". The section is marked *ff* and includes the instruction "intense, chaotic improv., all strings, as fast as possible".
- Violoncello:** Starts with a rest for ca. 2". The section is marked *ff* and includes the instruction "intense, chaotic improv., all strings, as fast as possible".

Each section concludes with a dynamic marking of *f* and a tempo marking of 60 bpm. The score uses a mix of treble and bass clefs for the instruments.

The image displays a musical score for four staves, likely representing a piano and guitar duo. The score is divided into four measures by vertical dashed lines. The first measure contains piano (piano) parts for all four staves, each marked with a fortissimo (*ff*) dynamic and a bracket labeled "ca. 3''". The second measure features a central piano part in 5/4 time with a tempo marking of quarter note = 60. It includes a triplet of notes with a *poco* marking. The guitar part in this measure is marked with a fortissimo (*f*) dynamic. The third measure shows guitar parts for all four staves, each marked with a fortissimo (*ff*) dynamic and a bracket labeled "ca. 3''". The fourth measure continues with piano parts for all four staves, each marked with a fortissimo (*ff*) dynamic and a bracket labeled "ca. 3''". The guitar part in the fourth measure is marked with a fortissimo (*ff*) dynamic and a bracket labeled "ca. 3''". The score also includes various musical notations such as rests, triplets, and dynamic markings like *ppp* and *f*.

6

ca. 3"

ff

ca. 2"

ca. 3"

ff

ca. 2"

ca. 3"

ff

ca. 2"

ca. 3"

ff

ca. 2"

3 *p*

3 *pp*

3/4

3/4

3/4

3/4

This musical score consists of four staves, each with a treble clef and a 3/8 time signature. The first staff begins at measure 10 with a quarter note G4. The second staff begins with a quarter rest followed by a quarter note F4 with a flat. The third and fourth staves begin with a quarter rest followed by a quarter note E4 with a flat. Each staff contains a sequence of notes with fingerings: the first staff has notes G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F5 (2), G5 (3), A5 (4), B5 (5), C6 (1), D6 (2), E6 (3), F6 (4), G6 (5); the second staff has notes G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F5 (2), G5 (3), A5 (4), B5 (5), C6 (1), D6 (2), E6 (3), F6 (4), G6 (5); the third staff has notes G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F5 (2), G5 (3), A5 (4), B5 (5), C6 (1), D6 (2), E6 (3), F6 (4), G6 (5); and the fourth staff has notes G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F5 (2), G5 (3), A5 (4), B5 (5), C6 (1), D6 (2), E6 (3), F6 (4), G6 (5). Dynamics include *ff* for the first three staves and *mf* for the second and fourth. A bracket labeled "ca. 4-5''" spans the first three staves. A vertical dashed line is positioned between the first and second staves. A second vertical dashed line is positioned between the third and fourth staves. The third and fourth staves end with a triplet of notes G6, F6, E6 marked *mp*. A bracket labeled "ca. 2''" is placed above the first staff, and another "ca. 2''" is placed above the second staff. A "ca. 2''" label is placed above the third staff, and another "ca. 2''" is placed above the fourth staff. The time signature changes to 3/4 at the end of the third and fourth staves.

14

Musical notation for four staves. The top staff is in treble clef with a 7-measure rest, marked *mp*. The bottom three staves are in bass clef with a 7-measure rest. A double bar line is present at the end of the rests.

ca. 5"

ff

ca. 3"

ca. 5"

ff

ca. 3"

ca. 5"

ff

ca. 3"

ca. 5"

ff

ca. 3"

50
44

50
44

50
44

50
44

18

Staff 1: Treble clef, 3/4 time, rests.

Staff 2: Treble clef, 3/4 time, rests, then arco section with dynamics *ppp*, **mf*, *ppp* and instruction **as loud as possible*.

Staff 3: Bass clef, 3/4 time, notes with dynamics *pp*, *mf*, *pp*, *f*.

Staff 4: Bass clef, 3/4 time, rests, then arco section with dynamics *ppp*, **mf*, *ppp*, *f* and instruction **as loud as possible*.

ca. 4"

ff → s.p.

ca. 4"

ff → s.p.

ca. 4"

ff → s.p.

ca. 4"

ff → s.p.

The image shows a musical score for four staves, likely for a piano. The score is divided into two main sections by a vertical dashed line. The first section contains four staves of music, each with a dynamic marking of *fff* and a duration of approximately 2 seconds. The second section contains four staves of music, each with a dynamic marking of *fff* and a duration of approximately 3.5 seconds. A central staff provides a detailed view of a trill, starting with a *ppp* dynamic and ending with a *mf* dynamic, marked as *s.p.* (slowly). The trill is shown as a series of notes with a wavy line above them. The score is written in 2/4 time. The first staff has a starting measure number of 25. The score concludes with a trill instruction: "trill as fast as possible (s.p.)" and a dynamic marking of *ff* followed by *ppp* and *ff*.

29

ca. 1"

frantic

ff

trill as fast as possible

tr

s.p.

ppp *f*

ca. 3"

ca. 1"

frantic (s.p.)

ff

ca. 3"

ca. 1"

frantic (s.p.)

ff

ca. 3"

ca. 1"

frantic (s.p.)

ff

ca. 3"

ord.

mp *f*

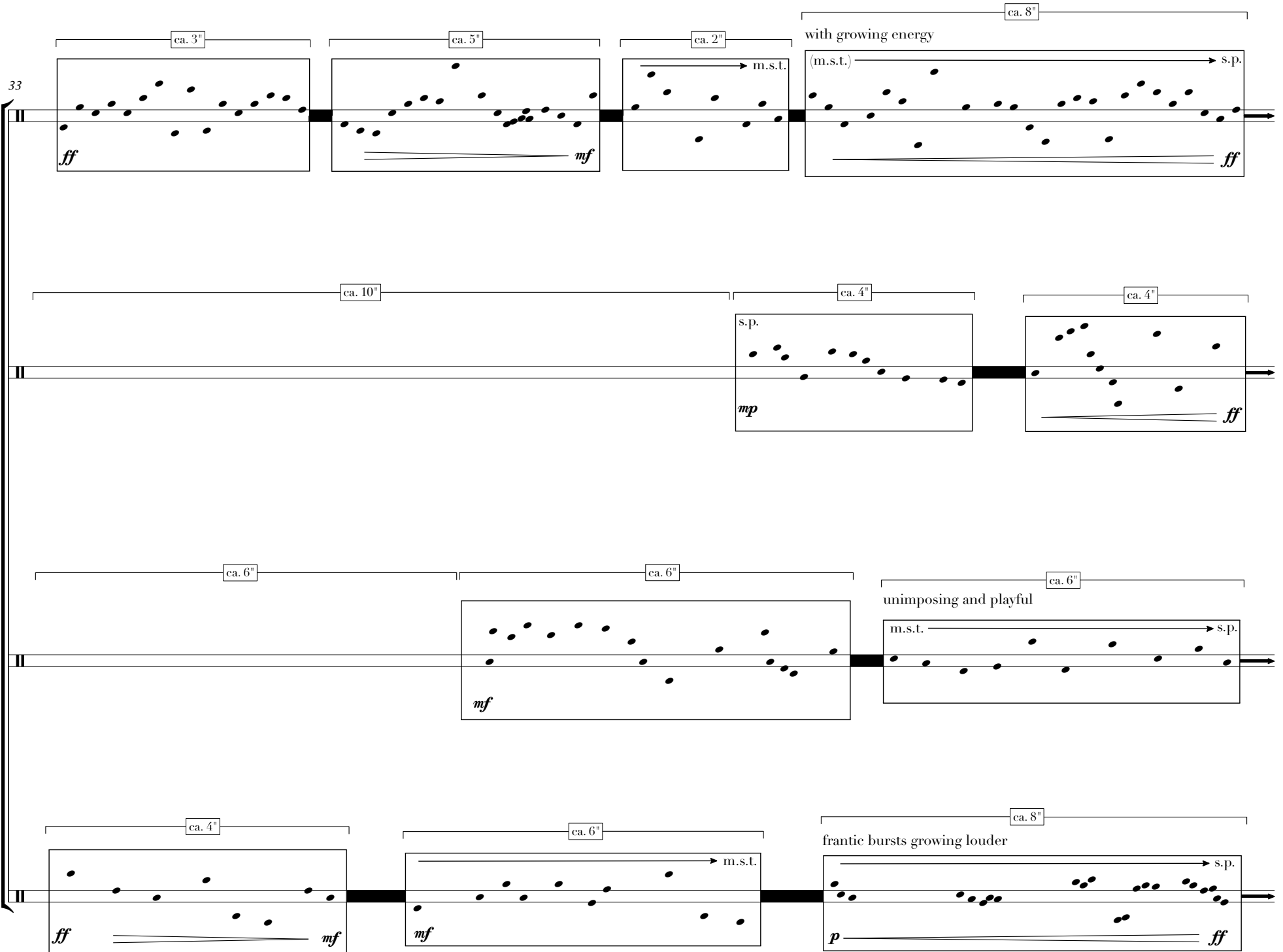
2/8

2/16

2/16

2/16

2/16



This musical score consists of four staves. The first three staves are primarily spectrograms, with the first staff starting at measure 36. Each spectrogram is divided into three segments by brackets, with durations labeled as 'ca. 5"', 'ca. 5"', and 'ca. 6"' from left to right. The first staff is marked *ff*. The second staff is also marked *ff* and includes a 'ca. 3"' bracket for its first segment. The third staff is marked *ff* and includes 'ca. 3"' and 'ca. 5"' brackets. The fourth staff is marked *ff* and includes 'ca. 3"', 'ca. 5"', and 'ca. 6"' brackets. The 'ca. 5"' bracket in the fourth staff is labeled 'swift bursts'. To the right of the spectrograms, there are four musical staves. The top staff is in 5/4 time with a tempo of $\text{♩} = 60$, marked *mp* and 'ord.'. The second staff is also in 5/4 time, marked *mp* and 'ord.', and features a long note with a slur. The third and fourth staves are in 5/4 time and contain rests. A vertical dashed line is positioned between the spectrograms and the musical notation.

38 *jeté* *mp* *ca. 5ⁿ* $\text{♩} = 72$ *pp* *s.p.* *p* 7 6 7

pp *ca. 5ⁿ* *jeté* *s.p.* *mp* *p* 7

col legno tratto *p* *ca. 5ⁿ* *pizz. (snap)* *arco s.p.* *p* 3 3 3

pizz. *p* *ca. 5ⁿ* *arco s.p.* *f* *mp* 5 3 *mp* 3

bounce the bow vertically

42 *ca. 5ⁿ* *ca. 2ⁿ* *ca. 5ⁿ* $\text{♩} = 72$ *steadfast and frantic*

pppp *mp* *pppp* *ord.* 7 *p* $\frac{3}{4}$

pppp *ca. 2ⁿ* *pppp* *ord.* 6 *p* $\frac{3}{4}$

pppp *ca. 2ⁿ* *pppp* *col legno tratto* *pp* $\frac{3}{4}$

pp *ca. 2ⁿ* *pppp* *pizz.* $\frac{3}{4}$

62 ord. *f* *fp* *mp* *fp* *fp* *f* *fp* *f*

6

65 *fp* *fp* *fp* *fp* *fp* *ff* *f* *f* *ff*

6

68

fff 7 f

fff 7 f

fff 7 f

fff 7 f

72

ff 7 f long

ff 7 f long

ff 7 f long

ff 7 f long

Play each box at your own pace chaotically, aggressively, and asynchronously

76

highest pitch possible

ff

f *ff*

s.p. → m.s.p.

6

fp *ff*

pizz. (snap)

mf *ff*

5

pizz. (snap)

f

as aggressive as possible

mf *ff*

pizz. (snap)

f

3

(pizz.)

f

3

3

(♩=66)

repeat once before continuing on

s.p.

6

6

ppp *ff* *ppp*

pizz. (snap)

f

aggressively

pizz. (snap)

arco m.s.p.

pizz.

p *f* *ff*

78

*strum all open strings with thumb in motion indicated

arco ord. *p* *ff*

pizz. *mp* *ff*

*mute all strings, strum with nails of four fingers

fff *p* *f* arco *pp* *ff* *p* *mf*

arco ord. *pp* *ff*

pizz. 3 *mf*

*strum all open strings with right hand fingers in motions indicated

arco ord. *ppp* *f* m.s.p.

scratchy with increased bow pressure (m.s.p.) *pp* *ff*

*mute all strings, strum with nails of fingers

pizz. 5 *mf* (pizz.) *mf*

arco ord. *pp* *ff* pizz. (snap)

(pizz.) *f* *ff* *mf* *f*

arco behind the bridge *f* *p* *mf*

Repeat wild, chaotic, but quiet improvisation in bold box until everyone is synchronized for 10 seconds

The musical score consists of four staves, each with a treble or bass clef and a 4/4 time signature. The score is divided into two main sections by a vertical dashed line. The first section starts at measure 80 and ends at measure 81. The second section starts at measure 81 and continues to the end of the page. Each staff has a bold box containing a sequence of notes, with the instruction "m.s.p., at the frog" and a dynamic marking of *ppp*. Above each bold box is a box containing "ca. 10".

Staff 1 (Treble Clef): Starts at measure 80 with a dynamic marking of *ff*. The bold box contains a sequence of notes. The second section starts at measure 81 with a dynamic marking of *mp* and a "long" instruction.

Staff 2 (Treble Clef): Starts at measure 80 with a dynamic marking of *ff*. The bold box contains a sequence of notes. The second section starts at measure 81 with a dynamic marking of *pp*, a "pizz." instruction, and a "long" instruction.

Staff 3 (Bass Clef): Starts at measure 80 with a dynamic marking of *ff*. The bold box contains a sequence of notes. The second section starts at measure 81 with a dynamic marking of *pp*, a "pizz." instruction, and a "long arco ord." instruction.

Staff 4 (Bass Clef): Starts at measure 80 with a dynamic marking of *ff*. The bold box contains a sequence of notes. The second section starts at measure 81 with a dynamic marking of *pp*, a "pizz." instruction, and a "long" instruction.

84 $\text{♩} = 72$

senza sord.
pizz.
f

senza sord.
pizz.
f

senza sord.
pizz.
mp

senza sord.
pizz.
ppp

senza sord.
pizz.
pp

long

mf

ppp

mp

89

ca. 3"

ca. 3"

ca. 3"

ca. 3"

(snap)

accel.

93 $\text{♩} = 81$

s.p.
col legno tratto

mf *f* *pp*

mf *f* *mp* *pp*

mp *mf* *f* *mp*

f *mf* *ppp* *f* *ppp* *<mf* *pizz.*

97

pizz. *f* *p* *pp*

f *p* *ppp*

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

pp *p* *ppp*

arco
jeté

s.p.

arco
s.p.

pizz. *p* *ppp*

101

ord. 3 *p*

pizz. *mp*

arco *pp*

arco s.p. col legno tratto *pp*

ord. jeté *pp*

s.p.

Match cello m.s.p. *mp*

pizz. *pp*

arco jeté *pp*

pizz. *ppp*

arco m.s.p. *mp*

arco *pp sempre*

pp < mf > ppp

pp sempre

ppp

104

♩ = 72

ca. 3rd

ca. 3rd

ca. 3rd

ca. 3rd

col legno tratto s.p. *p*

pizz. *p*

arco *ppp*

arco *ppp*

*as loud as possible

ppp **mf* *ppp*

pizz. *pp*

arco *pp*

pizz. *pp*

pizz. *p*

107

pp sempre 3

pizz. 3 *p*

arco *pp*

arco ord. *pp sempre* 3

arco *pp sempre* pizz.

ca. 3-4"

ca. 3-4"

ca. 3-4"

col legno tratto

ca. 3-4"

*jeté all players, all throughout with varied dynamics between pp-as loud as possible

110

(♩=72)

ca. 8-9"

I IV

mp

pp

ca. 8-9"

I IV

f

pizz.

arco

col legno tratto s.p.

pp *pp*

ca. 8-9"

I IV

s.p.

pizz.

PPP *f* *mp* *p*

Asynchronous improvisation with varied dynamics from *pp* to as loud as possible, as if fighting for attention.

*jeté all players, all throughout with varied dynamics between pp-as loud as possible

113

col legno tratto
s.p.

ppp

ff

f

pizz.

p

f

f

ca. 8-9"

I

IV

arco ord.

ca. 8-9"

I

IV

ord.

ca. 8-9"

I

IV

ca. 8-9"

I

IV

♩=96
s.p.
117
ff
mf
ca. 5ⁿ
pizz.
s.p. arco
ca. 5ⁿ
ff
s.p.
6
ca. 5ⁿ
s.p.
ord. s.p.
mf
ff
ca. 5ⁿ
♩=60

120
pp
pp
ppp
ord.
p
ord.
pp
pp

♩=72

124 s.p. 7 5

pp *mf* *ff* *mp*

s.p. 6 6

pp *ff* *mp*

pizz. arco s.p. 7

ff *f* *mp*

s.p. 7 3

pp *fpp* *mf*

pizz. arco s.p. 6 7

ppp *f* *mp*

as loud as possible sempre



127 ca. 3" ord. weightless and unnoticed s.p. 3

pp *ff* *p*

ca. 3" *pp* 3 *mp* 3 *pp*

ca. 3" ord... weightless and unnoticed s.p. 7 3

pp *mf* *mp*

ca. 3" *ppp* 3 *ppp* *mf*

pizz. s.p. arco 3

ppp *mf*

131 $\text{♩} = 81$

arco ord. *pppp* *p* *f* *ppp*

ff *mf* *ff*

f *f* *ff* *ff* *ppp*

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

f *ff* *ppp* *p* *f* *ppp* *ff*



134

arco s.p. *ppp* *f* *mp* *f* *ppp* *p* *ppp* *p*

p *ff* *ppp* *f* *ff* *p* *fff*

f *mp* *ppp* *ff* *ppp* *f* *ppp*

ppp *intrusive and aggressive pizz.* *ff* *arco* *ppp* *f* *ppp* *increase bow pressure* *mp* *ff*

ord. arco *ppp* *p*

ord. arco *ppp* *f* *ppp*

gradually intensifying *p* *fff*

137

mf ppp pizz. ff arco ppp f ppp ca. 5th ca. 5th ca. 5th ca. 5th

140

pizz. ff ca. 5th mp 3 ca. 5th ca. 5th ppp arco s.p. ca. 5th mp ppp f mp ppp ca. 5th ca. 5th

143

arco s.p. *p* 3

ord. 6

arco *ppp* *mf* *ppp*

arco *ppp* *mf* *ppp* 3 pizz.

arco (s.p) *p* 3 *mf* *p subito* 5 m.s.p.

ca. 2ⁿ

ca. 2ⁿ

ca. 2ⁿ

ca. 2ⁿ

*fast, free bowing

harmonic gliss. *ad lib.*

147

pp

ppp

p

ppp

pp

ppp

arco *ppp* 3

pp

pp

$\text{♩} = 72$

151

Violin I: *<f> ppp*, *pp*, *mf*, *ppp fppp*

Violin II: *pizz.*, *arco*, *pp*, *mf*, *ppp fppp*

Viola: *<f> ppp*, *arco*, *pp*

Cello/Double Bass: *s.p.*, *pppp*, *<f>*, *arco ord.*, *pp*, *mf*, *ppp fppp*

155

Violin I: *s.p.*, *tr.*, *gradually slow down*

Violin II: *tr.*, *ppp*, *mp*, *ppp mf*

Viola: *tr.*, *ppp <p>*, *ppp mf*, *ppp*

Cello/Double Bass: *tr.*, *ppp*, *gradually slow down*

159 ca. 2" $\text{♩} = 60$

ca. 2" s.p. *pp* long

ca. 2" s.p. *pp* long

ca. 2" s.p. *pp* long

ca. 2" s.p. *pp* long

163

pp

legato
let incidental harmonics ring if possible
I
IV
pp

pp

staccato
I
IV
pp

let incidental harmonics ring if possible
I
IV
ppp

legato
I
IV
ppp

165

ord. ca. 2" ca. 5" ca. 4" ca. 5" ca. 9"
Bounce the bow vertically

ord. ca. 5" ca. 3" ca. 2" ca. 3" ca. 7" ca. 5"
Bounce the bow vertically

ord. ca. 4" ca. 3" ca. 3" ca. 8" ca. 7"
Bounce the bow vertically

ord. ca. 3" ca. 7" ca. 7" ca. 8"
Bounce the bow vertically

mf *ff* *ff* *ff*

169

The musical score is organized into four systems, each containing five measures. The measures are grouped by brackets with approximate durations in seconds (ca. 3", ca. 5", ca. 4", ca. 2", ca. 7", ca. 4", ca. 7", ca. 2", ca. 6", ca. 10", ca. 6", ca. 5", ca. 7", ca. 2", ca. 5", ca. 7", ca. 4", ca. 2", ca. 6", ca. 5").

System 1:

- Measure 1: ca. 3". Contains 'x' marks.
- Measure 2: ca. 5". Starts with 'pp' and a crescendo hairpin leading to 'mf'. Contains 'x' marks and solid dots.
- Measure 3: ca. 4". Contains 'f' and a decrescendo hairpin. Contains solid dots and open squares.
- Measure 4: ca. 2". Contains open squares.
- Measure 5: ca. 7". Contains 'ff' and solid dots.
- Measure 6: ca. 4". Contains solid dots.

System 2:

- Measure 1: ca. 7". Contains 'x' marks.
- Measure 2: ca. 2". Contains 'pp' and 'x' marks.
- Measure 3: ca. 6". Contains 'f' and a decrescendo hairpin. Contains solid dots and open squares.
- Measure 4: ca. 10". Contains 'ff' and solid dots.
- Measure 5: ca. 10". Contains solid dots.

System 3:

- Measure 1: ca. 6". Contains 'pp' and a crescendo hairpin leading to 'mp'. Contains 'x' marks and solid dots.
- Measure 2: ca. 5". Contains 'f' and a decrescendo hairpin. Contains solid dots.
- Measure 3: ca. 7". Contains open squares.
- Measure 4: ca. 2". Contains 'ff' and solid dots.
- Measure 5: ca. 5". Contains solid dots.

System 4:

- Measure 1: ca. 7". Contains 'pp' and a crescendo hairpin leading to 'mp'. Contains 'x' marks and solid dots.
- Measure 2: ca. 4". Contains 'f' and a decrescendo hairpin. Contains solid dots and open squares.
- Measure 3: ca. 2". Contains open squares.
- Measure 4: ca. 6". Contains 'ff' and solid dots.
- Measure 5: ca. 5". Contains solid dots.