

Asymptote

commissioned by NZTrio

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The violin is tuned in pure fifths to the piano's equal tempered E5; the E string tuned exactly to the piano E and then each of the other strings tuned a pure fifth below the one above, resulting in the following tuning: A 2 cents flat, D 4 cents flat, G 6 cents flat; There are 100 cents in an equal tempered semitone.

*VIOLIN: the E string is always open throughout the piece; the lower note is tuned justly to E in a whole number ratio; the violin dyad always implies a lower fundamental/series shown on the ossia staff. The first number in the ratio refers to the partial that the E string represents; the second number refers to the lower note; so for 3:2, here the E and A represent the 3rd and 2nd partials (respectively) of an imaginary harmonic series on A3 (a minor third below middle C, tuned 2 cents flat in relation to equal temperament - see ossia staff).

$\text{♩} = 72 \text{ c.}$
 A tuned 2 cents flat (3:2 pure fifth*)

(only change bow where marked, cresc. e dim. sempre)

Violin

$\text{♩} = 72 \text{ c.}$
 even and sustained; steady and serene
pochissimo sul ponticello

implying harmonic series on A3 (2 cents flat of 12EDO)

Cello

$\text{♩} = 72 \text{ c.}$
 pizz., release left hand finger

arco
 A tuned 2 cents flat (2:3 pure fifth with violin E)**
 A -2 (1:3)
 E +0 (3:3)

even and sustained,
pochissimo sul ponticello

The cello is tuned in pure fifths to the piano's equal tempered E5; the violin E string tuned exactly to the piano E and then each of the other strings tuned a pure fifth below the one above, resulting in the following tuning: A 2 cents flat, D 4 cents flat, G 6 cents flat; C 8 cents flat. The cello can take its A from the violin. There are 100 cents in an equal tempered semitone.

** CELLO: all given cello pitches are tuned justly (in whole number ratios) in relation to the violin open E5 (unless specified 'ord.'). For each pitch, a cents tuning is given (in relation to equal temperament), and then a whole number ratio. The second number in a ratio always refers to what E5, the open violin E string, represents as a partial, and the first number refers to the cello note; so here, 2:3 means that the cello A and the violin E represent the 2nd and 3rd partials (respectively) of an imaginary harmonic series on A3 (a minor third below middle C, tuned 2 cents flat in relation to equal temperament - see ossia staff above).

$\text{♩} = 72 \text{ c.}$
 until 352, hairpins should be quite subtle and not too expressive,
 only gently highlighting the contours within each gesture

Piano

$\text{♩} = 72 \text{ c.}$
 until 352, hairpins should be quite subtle and not too expressive,
 only gently highlighting the contours within each gesture

$\text{♩} = 72 \text{ c.}$
 6
 mf → f
 6
 mp
 ♫

2

7

B +2 cents (4:3 pure fourth)

Vln. sim.
(implying harmonic series on E3)

Vc. $\begin{matrix} \# & -14 \\ 8 & +0 \\ \# & +0 \\ \# & +0 \end{matrix}$ pizz. arco
E +0 (2:4) A -2 (1:3)

Pno. $\begin{matrix} 6 \\ \# & \# & \# & \# & \# & \# \end{matrix}$ sim. $\begin{matrix} 6 \\ \# & \# & \# & \# & \# & \# \end{matrix}$ arco
A -2 (2:3) $\begin{matrix} 6 \\ \# & \# & \# & \# & \# & \# \end{matrix}$

Ped.

11

A -2 cents (3:2)

Vln. B +2 (3:4)

Vc. pizz. arco
A -2 (2:3)

Pno. $\begin{matrix} 6 \\ \# & \# & \# & \# & \# & \# \end{matrix}$ $\begin{matrix} 6 \\ \# & \# & \# & \# & \# & \# \end{matrix}$

Ped.

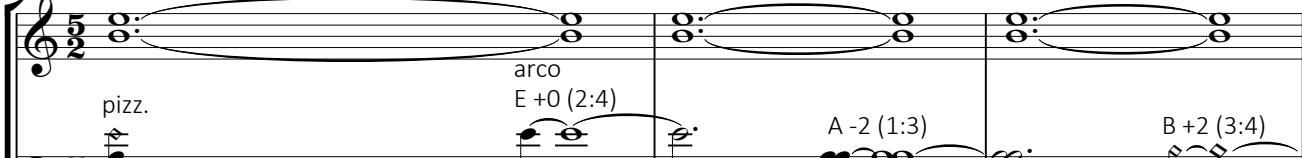
15

Vln. A -2 (1:3)

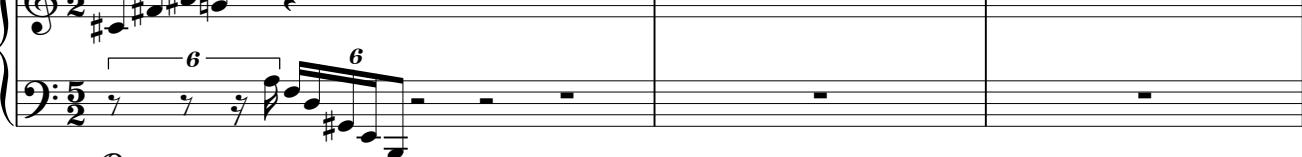
Vc. A -2 (4:3)

Pno. $\begin{matrix} 5 \\ 2 \end{matrix}$

21 B +2 (4:3)

Vln. 

Vc. 

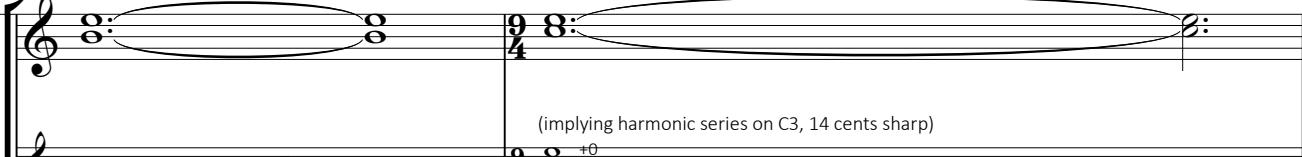
Pno. 

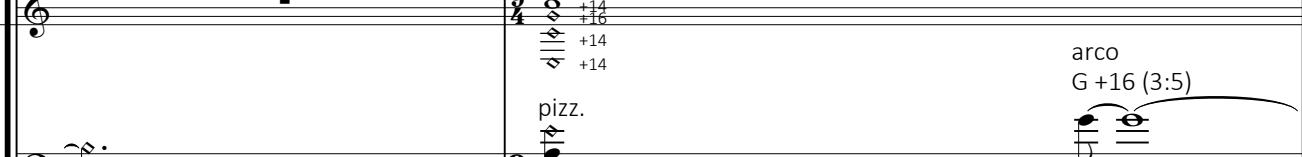
Mf *mp*

pizz. *arco*
E +0 (2:4) A -2 (1:3) B +2 (3:4)

ped.

24 C +14 (pure major third 5:4)

Vln. 

Vc. 

Pno. 

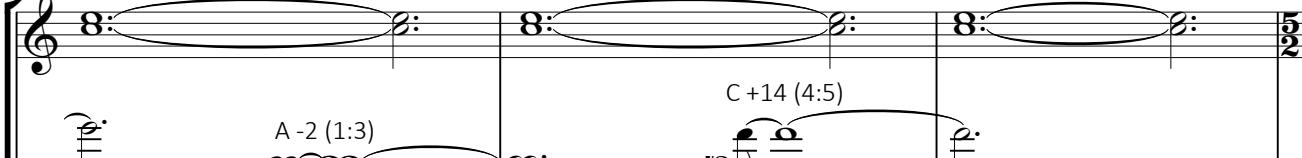
(implying harmonic series on C3, 14 cents sharp)

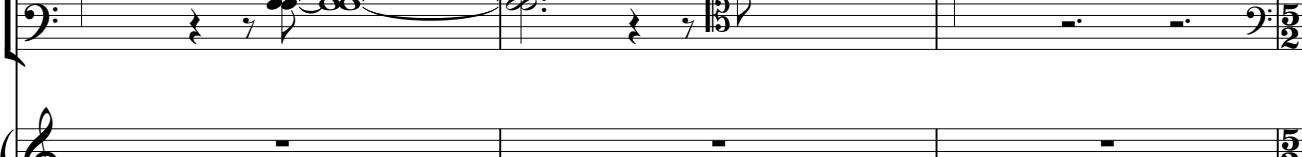
pizz. *arco*
G +16 (3:5)

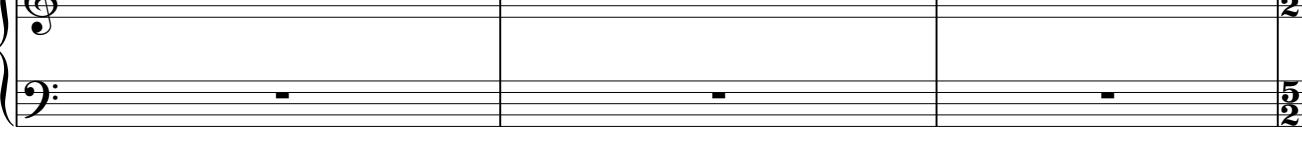
mf *mp*

ped.

26

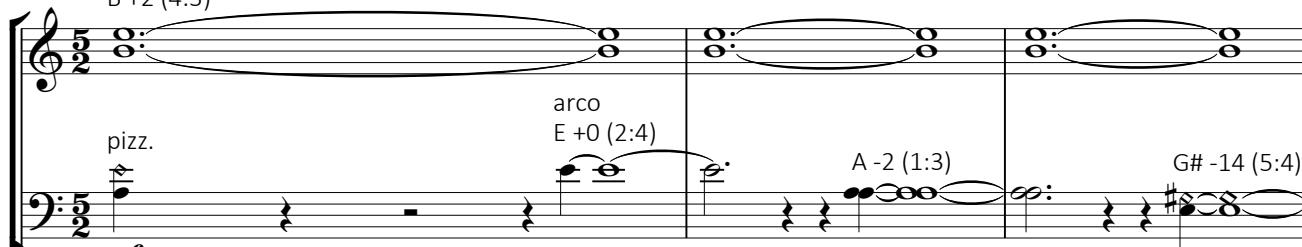
Vln. 

Vc. 

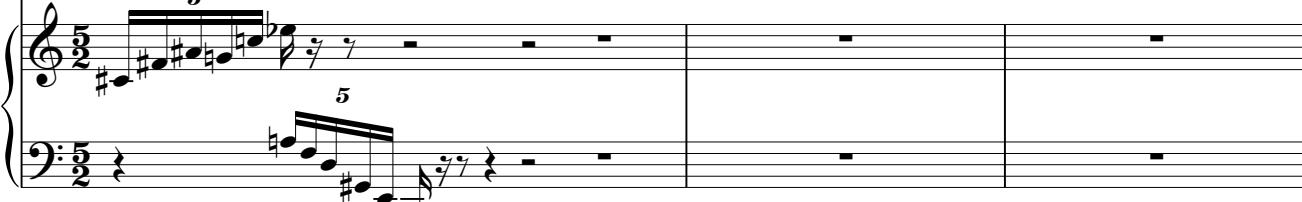
Pno. 

A -2 (1:3) C +14 (4:5)

29 B +2 (4:3)

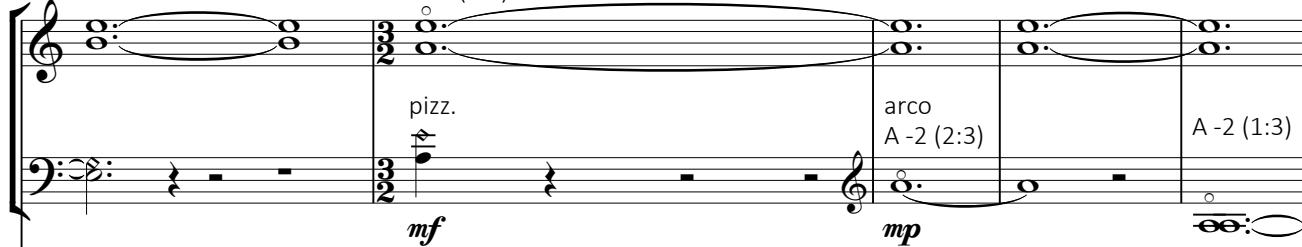
Vln. 

Vc. 

Pno. 

Ped.

32 A -2 (3:2)

Vln. 

Vc. 

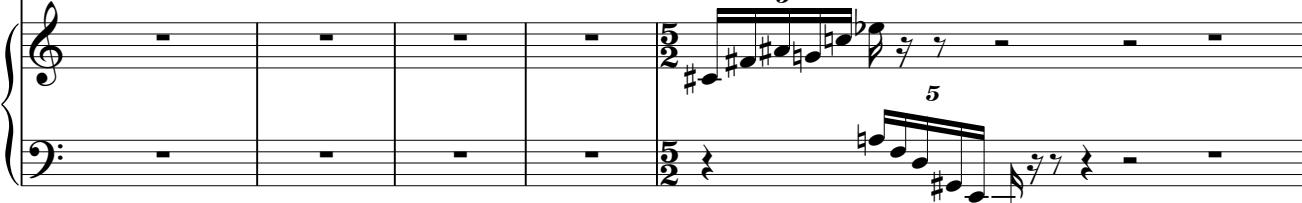
Pno. 

Ped.

37 B +2 (4:3)

Vln. 

Vc. 

Pno. 

Ped.

Musical score for strings and piano, measure 42. The score is in common time (indicated by '4/4' at the end of each measure). The instrumentation includes Violin (Vln.), Cello (Vc.), and Piano (Pno.). The Violin and Cello play eighth-note patterns with grace notes, while the Piano provides harmonic support with sustained notes. Measure 42 consists of three measures. The first measure shows the Violin and Cello playing eighth-note patterns with grace notes. The second measure shows the Violin and Cello playing eighth-note patterns with grace notes, and the Piano providing harmonic support with sustained notes. The third measure shows the Violin and Cello playing eighth-note patterns with grace notes, and the Piano providing harmonic support with sustained notes.

Musical score for strings and piano, page 45. The score is divided into two systems by a vertical bar line.

String Section (Vln., Vc.)

- Measure 1:** Violin (Vln.) plays eighth-note pairs in 5:4 time signature. Dynamic: *pizz.*
- Measure 2:** Violin (Vln.) continues eighth-note pairs. Dynamic: *mf*.
- Measure 3:** Violin (Vln.) continues eighth-note pairs. Dynamic: *mp*.
- Measure 4:** Violin (Vln.) continues eighth-note pairs. Dynamic: *mp*.
- Measure 5:** Violin (Vln.) continues eighth-note pairs. Dynamic: *mp*.
- Measure 6:** Double bass (Vc.) plays eighth-note pairs. Dynamic: *mp*.
- Measure 7:** Double bass (Vc.) continues eighth-note pairs. Dynamic: *mp*.
- Measure 8:** Double bass (Vc.) continues eighth-note pairs. Dynamic: *mp*.
- Measure 9:** Double bass (Vc.) continues eighth-note pairs. Dynamic: *mp*.
- Measure 10:** Double bass (Vc.) continues eighth-note pairs. Dynamic: *mp*.

Piano (Pno.)

- Measure 1:** Piano (Pno.) plays eighth-note pairs. Measure number: 5.
- Measure 2:** Piano (Pno.) continues eighth-note pairs. Measure number: 5.
- Measure 3:** Piano (Pno.) rests.
- Measure 4:** Piano (Pno.) rests.
- Measure 5:** Piano (Pno.) rests.

Performance Instructions:

- Measure 1:** Violin dynamic: *pizz.*
- Measure 2:** Violin dynamic: *mf*.
- Measure 3:** Violin dynamic: *mp*.
- Measure 4:** Violin dynamic: *mp*.
- Measure 5:** Violin dynamic: *mp*.
- Measure 6:** Double bass dynamic: *mp*.
- Measure 7:** Double bass dynamic: *mp*.
- Measure 8:** Double bass dynamic: *mp*.
- Measure 9:** Double bass dynamic: *mp*.
- Measure 10:** Double bass dynamic: *mp*.
- Measure 1:** Piano measure number: 5.
- Measure 2:** Piano measure number: 5.
- Measure 3:** Piano rests.
- Measure 4:** Piano rests.
- Measure 5:** Piano rests.

50

Vln.

Vc.

Pno.

E +0 (3:12)
A -2 (2:12)

C# -16 (5:6)

(18/8)

55

Vln.

Vc.

Pno.
9:8

C +14 (5:4)

pizz.

mf

arco
G +16 (6:10)

mp

Ped.

58

Vln.

Vc.

Pno.

(9/4)

E +0 (3:12)
A -2 (2:12)

Eb +30
C +14

don't change bow

sounding G +16 (6:5 to E +0)