

# Golden Ratio for Humming and String Quartet

Humming : Each person should start from your birth day and continue to end of music (intermission is allowed fleely).  
(Before performing, rehearsal of each humming parts (audience) is recommended.)

Masao Yokoyama

♩ = 60

1月 雪舞う、凍える朝

2月 吹雪き、目の前が白く

Soprano \* F: 702Hz (near F, same Violin 1 E string) and A 440 Hz(A)  
Alto \* D#: 612Hz (near D#, same Violin 2 E string) and A: 440 Hz  
Tenore \* A : 220Hz and D: 297 Hz(near D, same Viola D string)  
Bass \* D: 153 Hz(near D#, same Cello D string), G: 91 Hz (near F#, same Cello G string)

long humming  
free timing  
continue this pattern *cresc.* *f* [0'60"]  
continue this pattern *cresc.* *f*

3月 雪解けと湧水

4月 花、鳥

sub p  
continue this pattern [1'31"]  
continue this pattern [2'01"]  
continue this pattern  
continue this pattern

5月 風、青葉

6月 雨

p  
continue this pattern [2'32"]  
continue random pattern [3'02"]  
continue this pattern  
continue random pattern

timing and note randomly

7月 雷、雨

8月 嵐その後、花火、波、蟬

*sf*  
continue this pattern [3'33"]  
continue this pattern *p* [4'04"]  
continue this pattern *cresc. e accel.*  
continue this pattern *ff*  
continue this pattern *dim.*

9月 夜更け、虫の声がそこかしこから

10月 秋風の夜、月が静かに昇る

*p*  
continue this pattern [4'34"]  
continue this pattern [5'05"]  
continue this pattern  
continue this pattern

11月 風に舞い散る枯葉

12月 再び冬、小雪舞始めてきた

*p*  
continue this pattern [5'35"]  
continue this pattern *morendo* [6'06"]  
continue this pattern  
continue this pattern *morendo*

# Golden Ratio for Humming and String Quartet

Violin I

continue long note ♪ ... ∞  
ad lib. at random using these notes Masao Yokoyama

1月 雪舞う、凍える朝

♩ = 60

[1 / 8, 0'08" ]

*ppp* *pp* *pp* *pppp ... pp*

[0'31" ]

\* I : 702Hz (near F), II: 440 Hz(A), III: 297 Hz (near D), IV: 213 Hz(between G#-A)

2月 吹雪き、目の前が白く

2

repeat ad lib.

[2 / 22, 0'53" ]

*p* *f*

[0'60" ]

3月 雪解けと湧水

3

[3 / 6, 1'06" ] ad lib. repeat this pattern.

sul tasto e leggero

*p* *pp* *mp*

[3 / 26, 1'26" ] [1'31" ]

4月 花、鳥

4

[4 / 15, 1'46" ]

*mf*

repeat ad lib.

[2'01" ]

5月 風、青葉

5

select patterns randomly

*pp* *mp*

repeat ad lib.

[5 / 18, 2'19" ] [2'32" ]

6月 雨

6

repeat ad lib.

pizz. arco

[6 / 20, 2'52" ] [3'02" ]

*p* *mp*

Violin I

7月 雷、雨 sul pont. [7/11, 3'13"]  
 7 repeat after viola between bridge and tail piece repeat [3'33"]  
*p* < > *cresc.* *fff* *poco a poco cresc. and accel.*

8月 嵐その後、花火、波、蟬 [8/2, 3'33"]  
 8 repeat ad lib. [8/11, 3'45"] [4'04"]  
*ffff* *pp* *p* < *mp* > *pp*

9月 夜更け、虫の声がそこかしこから [9/3, 4'06"]  
 9 number of note ad lib. repeat ad lib. [4'34"]  
*p* < > *ppp*

10月 秋風の夜、月が静かに昇る [10/6, 4'39"] [10/26, 4'59"] [5'05"]  
 10 *dim.* *p* < > *pp* < > *ppp* *ppp*

11月 風に舞い散る枯葉 [11/7, 5'12"]  
 11 col legno repeat. timing and tempo ritardando [5'35"]  
*mf* < > *dim.* *pp*

12月 再び冬、小雪舞始めてきた [12/9, 5'44"] [12/22, 5'57"] [6'06"]  
 12 sul pont. harmonics gliss. *p* < > *pp* < > *ppp* *morendo*

# Golden Ratio for Humming and String Quartet

Violin II

Masao Yokoyama

## 1月 雪舞う、凍える朝

♩ = 60 [0'31"]

\* I: 612Hz (near D#), II: 440 Hz(A), III: 260 Hz (near C), IV: 181 Hz(near F#)

## 2月 吹雪き、目の前が白く

tremollo e sul pont. [2 / 22, 0'53"] [0'60"]

ad lib. at random using these harmonics

## 3月 雪解けと湧水

3 [3/26, 1'26"] [1'31"]

sul tasto e leggero

## 4月 花、鳥

select patterns randomly 4 [2'01"]

repeat ad lib.

## 5月 風、青葉

5 [2'32"]

poco a poco accel.

poco a poco cresc.

mf dim.

## 6月 雨

6 [6/3, 2'32"] [3'02"]

pizz.

ad lib. use these notes.  
free timing.

Violin II

7月 雷、雨

7 [7/11, 3'13"]

*sfff* arco

repeat

*ff* *poco a poco cresc. and accel.* *sfff* *f*

repeat

[3'33"]

8月 嵐その後、花火、波、蝉

8 [8/11, 3'45"]

*ffff*

*mp* *mf* *mf*

*p* *mp* *pp*

repeat ad lib.

[4'04"]

9月 夜更け、虫の声がそこかしこから

9 [9/3, 4'06"]

number of note ad lib.

repeat ad lib.

*p* *ppp*

[4'34"]

10月 秋風の夜、月が静かに昇る

10 [10/6, 4'39"]

L.v.

play after Vn.I

*ppp*

[10/26, 4'59"]

[5'05"]

11月 風に舞い散る枯葉

11 [5'35"]

[11/27, 5'32"]

*mf* *dim.* *pp*

12月 再び冬、小雪舞始めてきた

12 no tempo

[12/25, 6'00"]

[6'06"]

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

# Golden Ratio for Humming and String Quartet

Viola

Masao Yokoyama

1月 雪舞う、凍える朝  
♩ = 60  
[1 / 13 0'13"]  
continue long note ♩ ... ○  
ad lib. using these notes  
IV ○ III ○  
pp pppp ... pp  
[0'31"]

\* I : 440Hz (A), II: 297 Hz(near D), III: 207 Hz (near G#), IV: 122 Hz(near H)

2月 吹雪き、目の前が白く  
2  
[2 / 3, 0'33"]  
sul pont.  
p ppp cresc.  
ad lib. at random using these harmonics  
cresc. e accel.  
[0'60"]

3月 雪解けと湧水  
3  
sul tasto e leggero ad lib. free choice from these pattern.  
p  
repeat cresc. e decresc.  
[1'31"]

4月 花、鳥  
4  
select patterns randomly  
p mp pp  
repeat ad lib.  
mf 3 3  
repeat ad lib.  
[2'01"]

5月 風、青葉  
5  
poco a poco accel.  
p poco a poco cresc. mf  
[2'32"]

6月 雨  
6  
[6/20, 2'52"]  
mf pp mp ppp  
[3'02"]

7月 雷、雨 [3'33"] [4'04"]

blow f hole repeat

*p < mf* *poco a poco cresc. and accel.* *fff* *mf > p* *poco a poco decresc.*

8月 嵐その後、花火、波、蟬

blow f hole .repeat

9月 夜更け、虫の声がそこかしこから [4'34"]

higurashi

mf < *poco a poco dim* *pp* repeat more 2 times

number of note ad lib. repeat ad lib.

*p* *ppp*

10月 秋風の夜、月が静かに昇る [10/6 4'39"] [10/26, 4'59"] [5'05"]

*ppp* continue

11月 風に舞い散る枯葉 [5'35"] [11/27 5'32"]

repeat ad lib. timing and tempo ritardando

*mp* *dim.* *p* *pp*

12月 再び冬、小雪舞始めてきた [12/22, 5'57"] [6'06"]

arco sul pont.

*mp* *mf* *p* *pp* *ppp* repeat e morendo

# Golden Ratio for Humming and String Quartet

Violoncello

Masao Yokoyama

♩ = 60

1月 雪舞う、凍える朝

[1 / 20, 0:20"]

sul pont.

[0'31"]

\* I : 220Hz (A), II: 153 Hz(near D#), III: 91 Hz (near F#), IV: 64 Hz(between H-C)

2月 吹雪き、目の前が白く

[2 / 5, 0'35"]

[0'60"]

3月 雪解けと湧水

[3/6, 1'06"]

[3/26, 1'26"]

[1'31"]

4月 花、鳥

select patterns randomly

repeat ad lib.

repeat ad lib.

[1'59"]

[2'01"]

5月 風、青葉

[5/18, 2'19"]

repeat

[2'32"]

6月 雨

[6/7, 2'39"]

[3'02"]



7月 雷、雨

[3'33"]

7

arco

*pp* *p* *fff*

[7/11, 3'13"]

repeat

*cresc. e decresc. ad lib. ma poco a poco accel.*

8月 嵐その後、花火、波、蝉

[4'04"]

8

*ffff* *mp* *mf*

6 6 6 3

repeat

*poco a poco decresc. pp*

9月 夜更け、虫の声がそこかしこから

[4'34"]

9

*mf* *pp*

10月 秋風の夜、月が静かに昇る

[5'05"]

10

[10/6 4'39"]

*ppp* *ppp*

11月 風に舞い散る枯葉

[11/27 5'32"] [5'35"]

11

harmonics gliss.

III

*mp* *pp* *mp*

gliss.

repeat. timing and tempo ritardando

12月 再び冬、小雪舞始めてきた

[6'06"]

12

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

pizz. con vib.

[12/22, 5'57"]

vib.