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Alessandro Ratoci

East St. Louis Blues

a psycho-geographic journey
for Piano, Tape and Live Electronics

(2016)

Note by the author:

*East St. Louis, Illinois, è al giorno d'oggi un limbo fra città e deserto. Un tempo contea all'avanguardia per economia e cultura, è stata culla di artisti importanti e il suo nome rimane legato a molti capolavori della musica afro-americana. Dopo la grande crisi dell'industria dell'acciaio e dopo essere stata considerata per alcuni decenni la città più povera e pericolosa d'America, il processo di disgregazione sia urbanistico che sociale è continuato a tal punto da farne ormai un "non luogo" dove la natura lentamente sta **s**inghiottendo e cancellando ogni traccia della presenza umana.*

East St. Louis Blues è un brano per pianoforte ed elettronica che si ispira all'esperienza di una "deriva" in questo luogo desolato (nella tradizione psicogeografica delle avanguardie situazioniste) alla ricerca delle rovine della casa natale di Miles Davis. I materiali sonori sono quasi interamente generati a partire da processi di composizione assistita dal computer, in particolare attraverso l'analisi spettrale di una selezione di vecchi dischi, "reliquie" della tradizione Blues e Swing. Questa scelta, motivata dall'esigenza estetica di "carpire" un suono familiare a traverso le sue ragioni fisiche è allo stesso tempo la volontà poetica di filtrare attraverso un processo rigoroso il suo contenuto emotivo. Il "margine d'errore", inevitabile quando si applicano delle analisi computerizzate non è evitato ma impiegato attivamente come mezzo di rielaborazione degli elementi musicali. Nel flusso continuo del suono del pianoforte, spesso utilizzato nella veste di strumento a percussione, si potranno forse trovare richiami agli strumenti della tradizione blues come la washboard, la tipica tavola da bucato percossa coi cucchiai o come la slide guitar e il banjo. Chi ascolta è però soprattutto invitato a perdersi nel suono "materico" senza una meta precisa relazionandosi di volta in volta con i fantasmi di un'antica bellezza che sembra svelarci poco a poco la strada per trovare nuovi mondi meravigliosi dove altri scorgono solo rovine.

Toscana, Giugno 2016

Nowadays, East St. Louis is a limbo in between the city and the desert. Once upon a time a rich city for economy and culture, it has been the birthplace of important artists and its name remains linked to many masterworks of afro-american music. After the great crisis of midwest rails and industry and after being considered for many decades one of the most poor and dangerous american neighbourhood, the process of social and urban desegregation has come to such extent that today it can be considered a nearly ghost city where nature is slowly taking his revenge deleting any trace of human presence.

East St. Louis Blues is a piece for piano and electronics inspired by the experience of a « dérive » (in the tradition of french situationist avant-garde) in this fascinating wasteland, in the pursuit of Miles Davi's childhood home. The sound materials are entirely generated from computer assisted composition processes, especially thru the spectral analysis of a series of early recordings of Duke Ellington's East St. Louis Toodle Oo. This choice, motivated by the aestethic necessity of « capturing » a familiar sound by it's physical features it's at the same time the poetic intention of filtering thru a rigorous algorithmic process it's emotional connotation. The margin of error connected to this kind of operations on digital audio is neither avoided nor minimised but, instead, actively used as a mean of musical elaboration and development. In te continuous flux of piano sound, often used as a percussive instrument, it might be possible to find references to the instruments of afro-american traditional music like the slide guitar, the banjo or the washboard but the listener is, more than everything else, invited to stray down in the raw sound without any precise destination, facing time by time the ghosts of a lost beauty which show us the path to find beauty where others can discern nothing but ruins.

Tuscany, June 2016

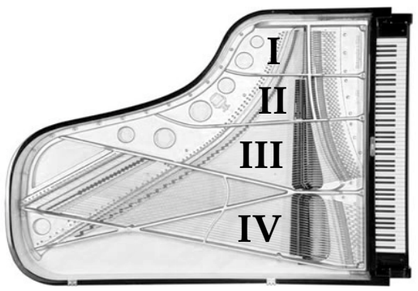
The inspiration and the first sketching of the piece has taken place during my short residency at the Mizzou University of Missouri (USA) at the 2015 Mizzou International Composers Festival and I consider it the result of my reflections face to the world of american contemporary music and american culture in a broad sense. In a certain sense this work is my personal tribute to the rural american society and would not have possible without the support of all those who made this experience possible. I would therefore like to express my sincerest thanks to:

Jeanne and Rex Sinquefield and the Sinquefield Charitable Foundation
Mizzou International Composers Festival (MICF)
Christopher Stark, composer and academic
Alan Pierson and the Alarm Will Sound Ensemble

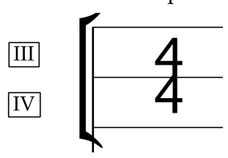
The piece is dedicated to italian pianist Stefano Malferrari, with friendship and high musical regard.

First performance:
Preliminary version, June 3rd 2016 Ravenna Festival, Stefano Malferrari, piano.
Final version, March 13rd 2016 Festival SMC Lausanne, Stefano Malferrari, piano.

Technical Notes:



The percussion on the stringboard is notated either on a single line staff (in this case the approximate register of strings to strike corresponds roughly to those played on the keyboard as to "obfuscate" or "clusterize" the regular playing) or with a larger staff in which the spaces corresponds to the different portions of piano frame:



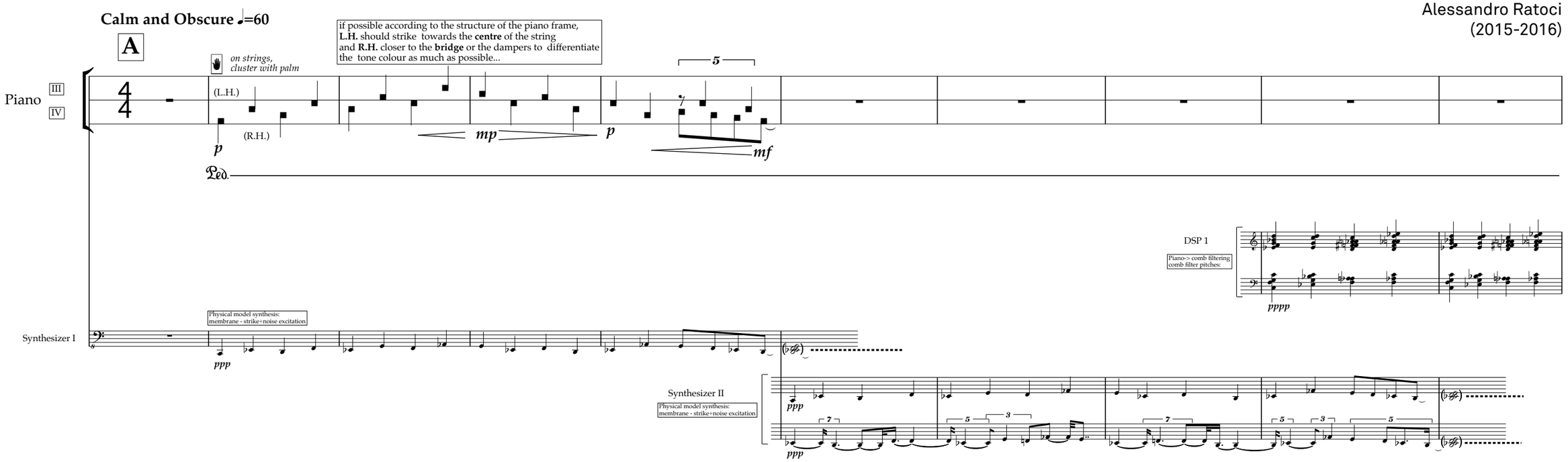
In addition to the regular playing technique on the keyboards the piece employs some other "extended" techniques which are typical of percussion instruments. It's necessary to employ the following means of percussion (beaters) as indicated in the score:

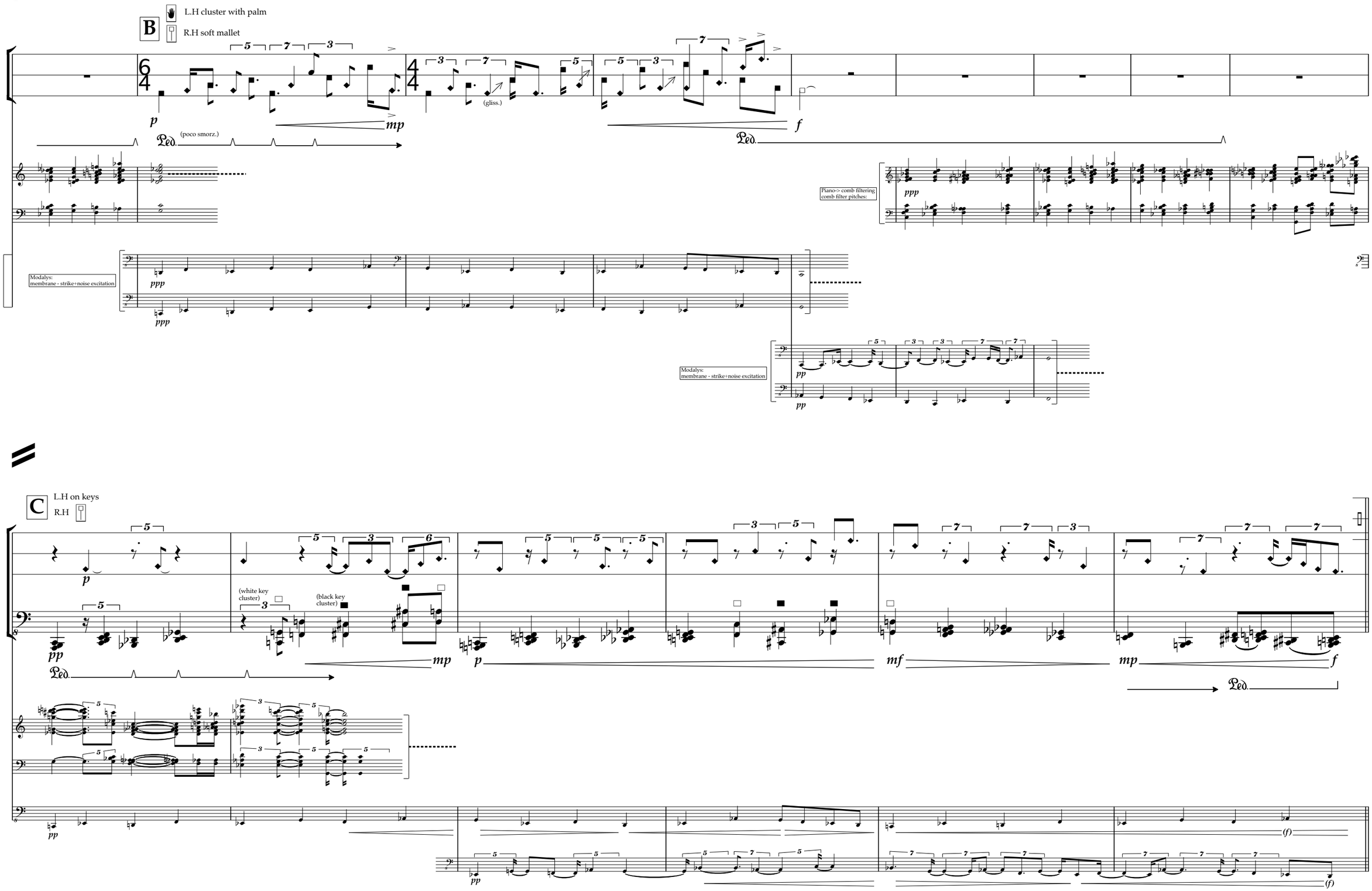
- Percussion with palm of the hand (or fingertips, to vary the colour) on the strings
- Soft mallet (bass drum yarn mallet)
- Medium mallet (rubber mallet)
- Hard plastic mallet
- Snare drum wood stick
- Guitar plectrum (soft)
- A wide (10 cm. approx) laminated object like a credit cart or an audio cassette box to strike a large portion (approximately a fifth) of strings

East St-Louis Blues

a psycho-geographic journey
for Piano, Tape and Live Electronics

Alessandro Ratoci
(2015-2016)




B
L.H cluster with palm
R.H soft mallet
(poco smorz.)
(gliss.)
Piano-> comb filtering
comb filter pitches:
Modalys:
membrane - strike+noise excitation
Modalys:
membrane - strike+noise excitation
C
L.H on keys
R.H
(white key cluster)
(black key cluster)

D **feroce** ♩=120

as hard as possible (!)
possibly with damper buzz

L.H.

ffff secco

as hard as possible (!)
with damper buzz

R.H

sfffffz

sim.

fff

Sample Mapping: small notes does not correspond to the actual sounding pitch but serve solely as a mapping refrence for the sound samples

Duke Ellington, "East St. Louis toodle oo"
noise extraction and fragmentation

(ff)

Geist Noise Kit

(ff)

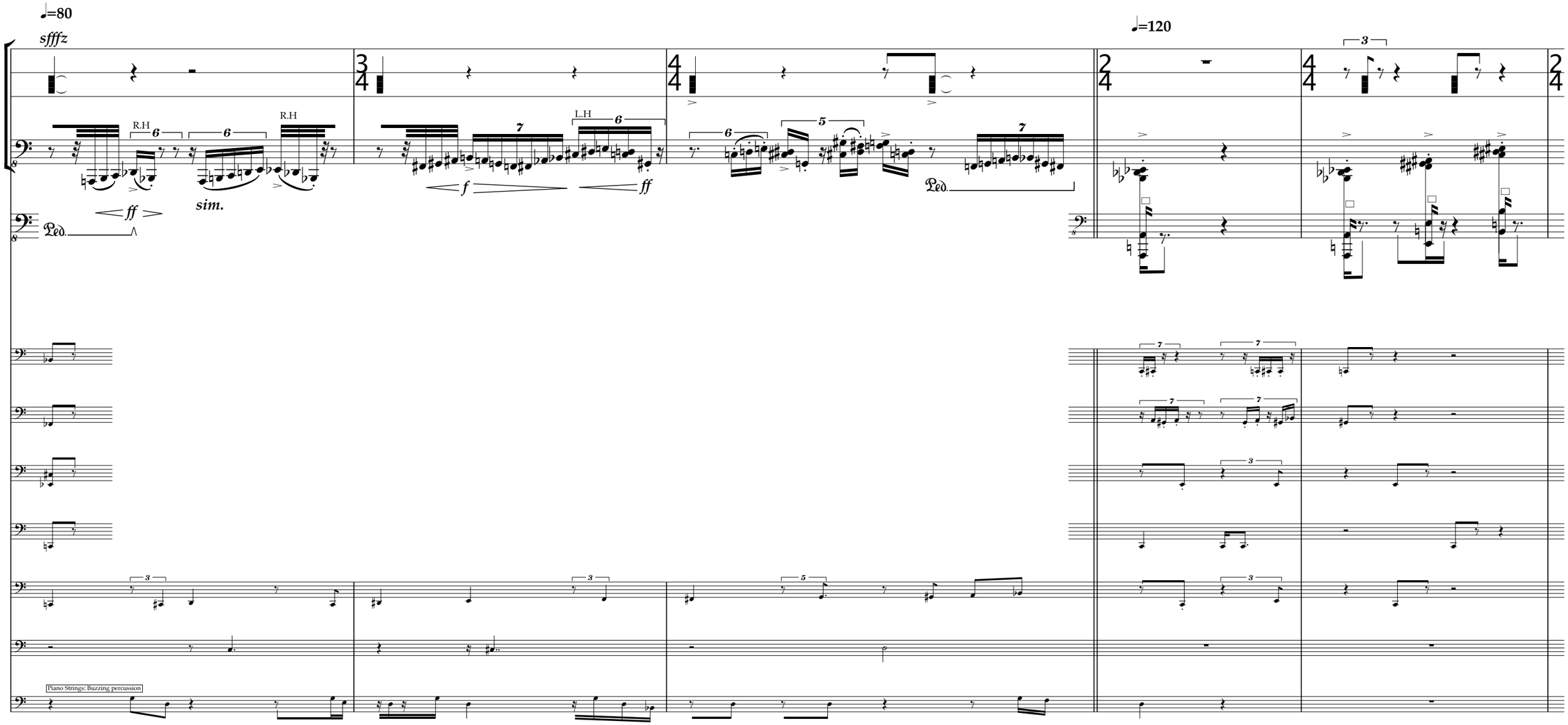
Upright piano - string percussions
with hands and wooden objects

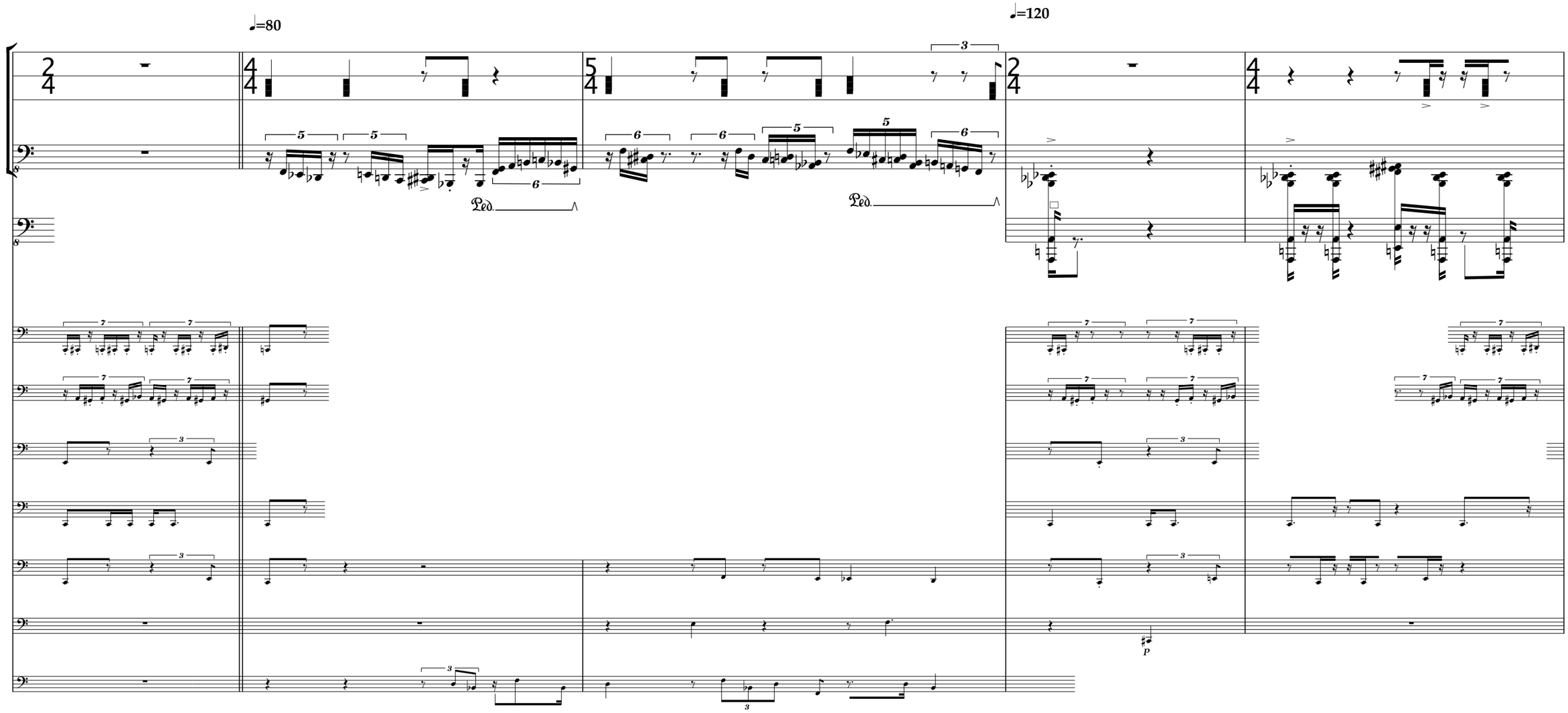
(ff)

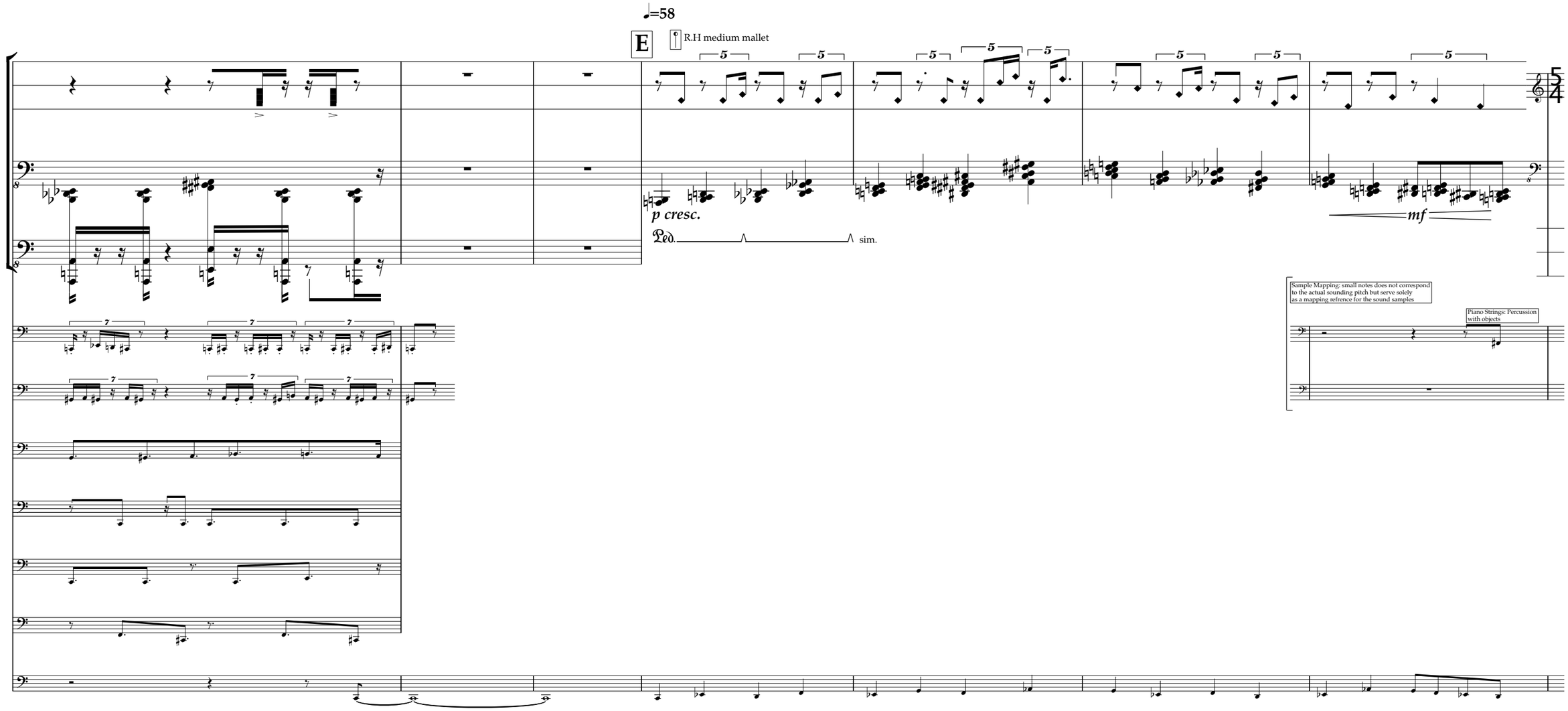
(ff)

(ff)

(ff)


♩=80
sffffz
R.H
R.H
L.H
ff
sim.
f
ff
Ped.
Ped.
♩=120
Piano Strings: Buzzing percussion


♩=80
♩=120
Ped.
Ped.
P


♩=58
E
R.H medium mallet
p cresc.
Ped.
sim.
mf
Sample Mapping: small notes does not correspond to the actual sounding pitch but serve solely as a mapping refrence for the sound samples
Piano Strings: Percussion with objects

♩=50

F

R.H. on strings with nails or guitar plectrum

the single line corresponds approximately to the register played on keys

mp *sim.*

bring out the bass...

Granular resynthesis of live piano sound: the pitches corresponds to transpositions relative to C3 (unity note)

Pianoteq:
Detuned muted piano 1/4 tone division

Piano Strings: Percussion with palm of the hand

accel.

♩=80

8va

ff

♩=58

G

hand on strings, damped

" fff "

mp

♩=63

H

p

groovy

accel.

mp cresc.

feroce ♩ = 120

I

sffz secco

sffz poss.

sffz poss.

ff

ff

(ff)

Sample Mapping; small notes does not correspond to the actual sounding pitch but serve solely as a mapping refrence for the sound samples

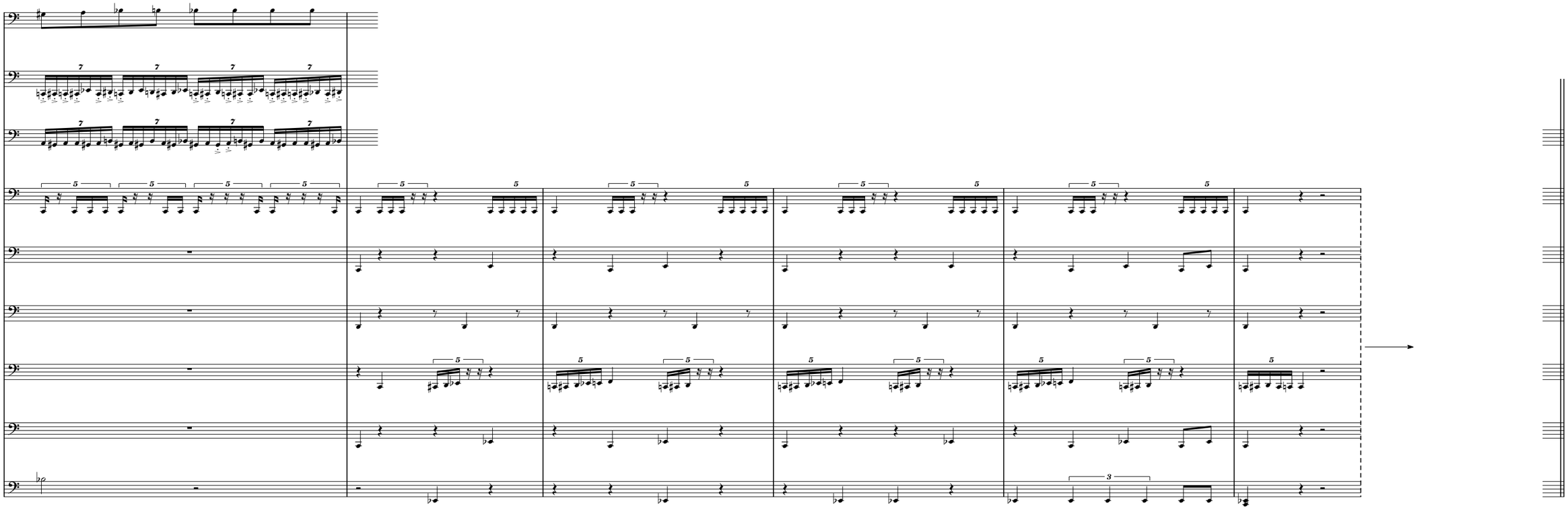
Electronic Cadenza

f

ff

ff

ff



J notturno ♩=40

R.H. with guitar pick

like a banjo or a dobro guitar...

always l.v.

sfpp

always l.v.

pp

Ped.

always pressed
until the end of section

DSP01: Granular delay with feedback

DSP: Separate (plectrum) attacks and resonances as much as possible (using amplitude envelope, spectral sound dscriptors, etc...)

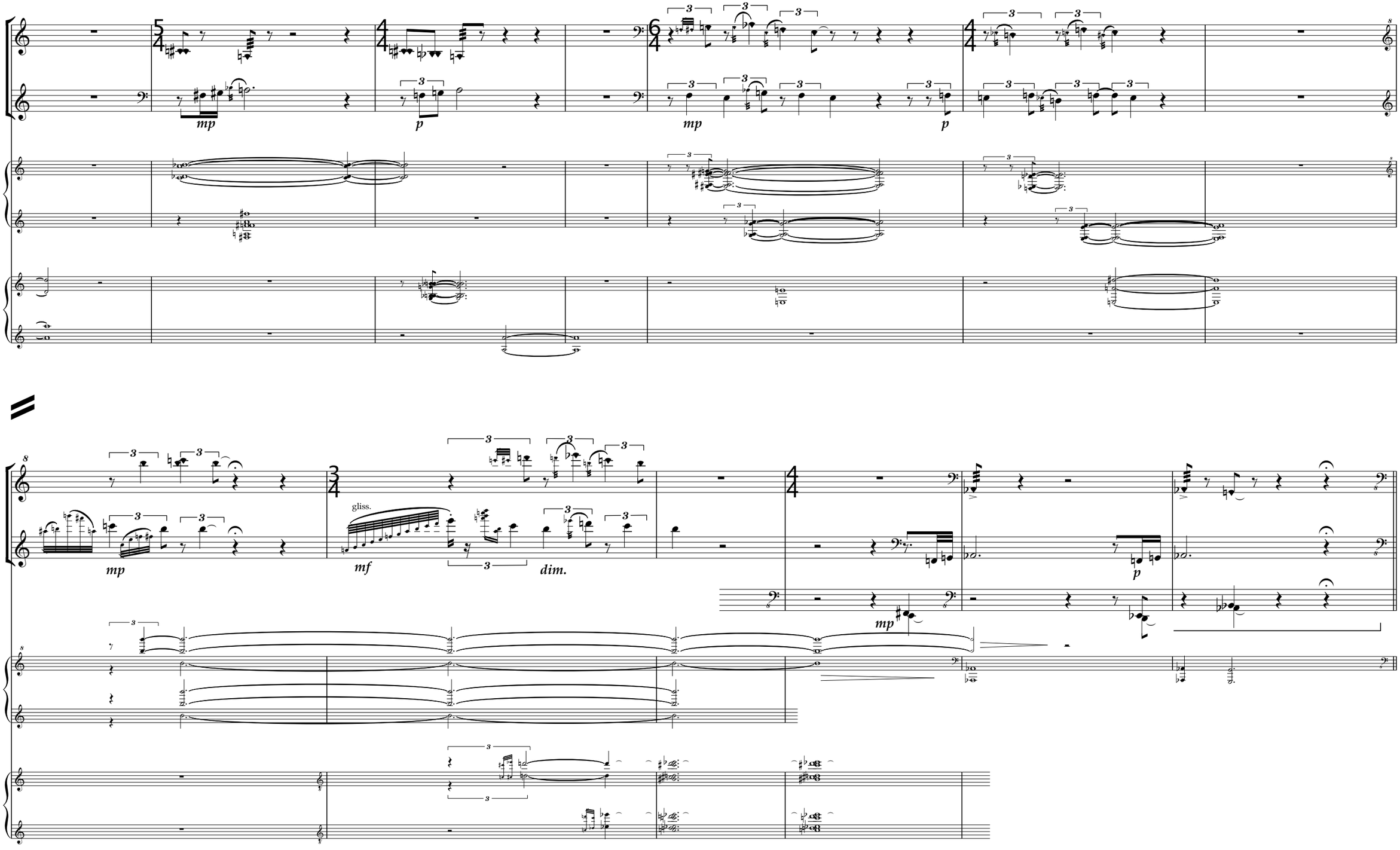
DSP02: Delay and detuning (Modulated "doppler" delay, Time/Pitch strech, etc...)

Physical Modelled Piano:
Hammer rebounding

sim.

Sampler

Physical Modelled Piano:
Hammer rebounding


mp
p
mp
p
mp
gliss.
mf
dim.
mp
p

♩=60

K

R.H soft mallet

ben misurato, groovy

p morbido, quasi flautando

Ped. ad lib.

Physical Models Synthesis:
Inharmonic timber

pppp cresc.

Additive Synthesis
Partials pitches

p dim

Additive Synthesis
Partials pitches

ppp cresc.

pp cresc.

mp dim.

mf

fff

ff

ff

64

♩=56

L with a kind of swing

accel.

Physical Model Synthesis:
Piano

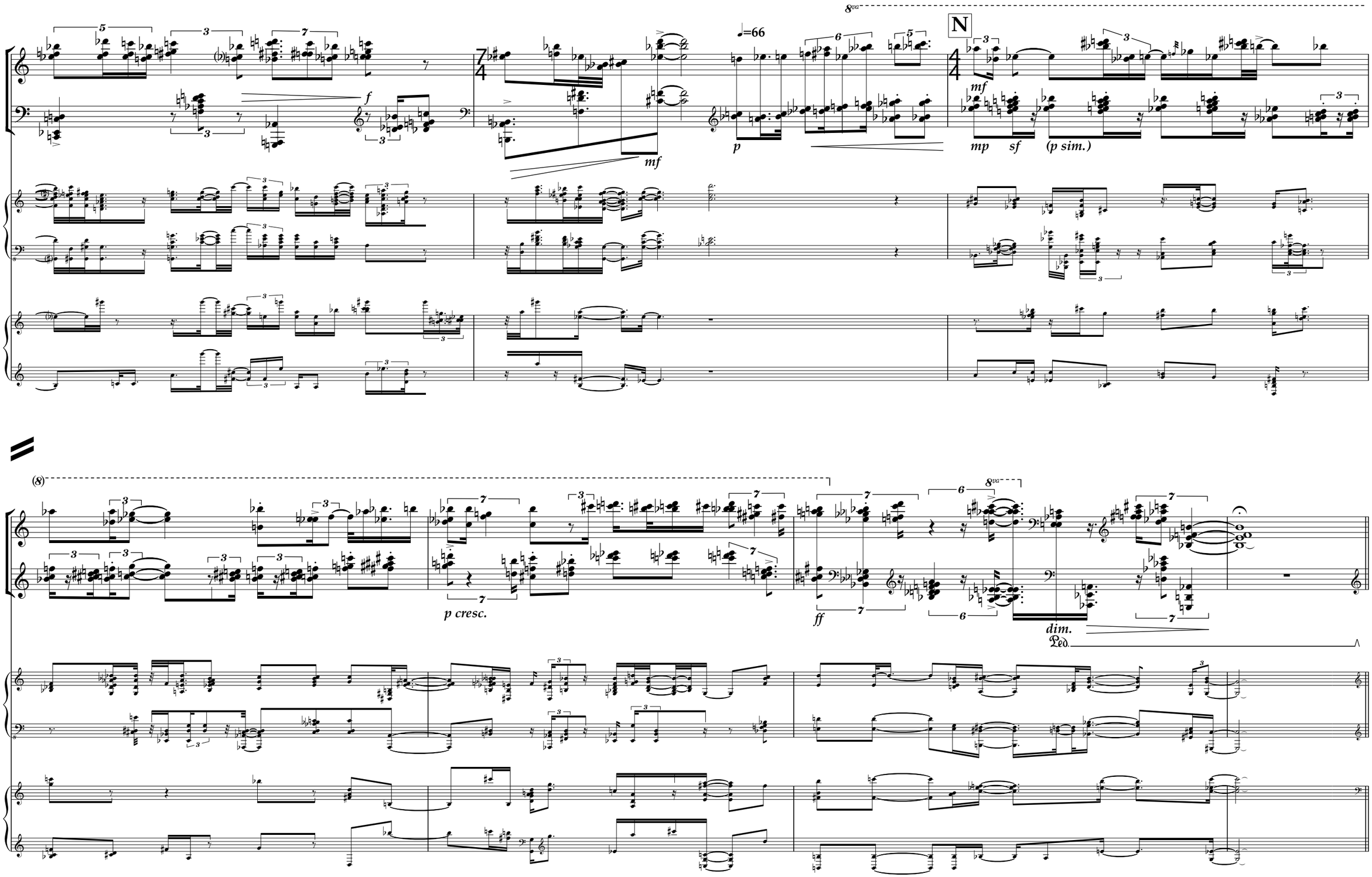
Physical Model Synthesis:
Piano 1/4 Tone higher

rall.

♩=66

con forza

M


8va
N
♩=66
f
mf
p
mp
sf
(p sim.)
(8)
p cresc.
ff
dim.
Ped.

♩=76

O

R.H. hard mallet
L.H. on keyboard

mf

ad lib.

Physical Models Synthesis:
Piano

Sampler:
Piano Harmonics

440 Hz

cresc.

ff poco dim.

P

Ped. ad lib.

Ped.

Q

mf

Ped. ad lib.

♩=72

R

p

pp *poco a poco cresc.* *f* *mp subito cresc.*

Ped.

Sampler:
Piano Harmonics

cresc. molto

sempre Ped.

chaotic!

ffff

♩=52

S

p oscuro

f marcato

con slancio!

p

f

♩=60

T

ff

♩=70

U

f

Ped.

Ped.

similar...

poco rall.

p

mf

♩=52

V

p cresc. poco a poco

Ped. Ped.

(mf)

(f)

8va 8vb

ff

fff

Ped. *tenuto*

W *non misurato*, as fast as possible

non misurato, as fast as possible

mf

Ped.

ff

with stick

p

mf

ff

Physical model Synthesis:
Piano

Physical model Synthesis:
Piano

Sampler:
Piano Harmonics

(*non misurato*, as fast as possible)

f

f

fff

♩=60

X

ffff

ff

Physical model Synthesis:
Piano

L.H.

R.H.

Ped.

p

Y

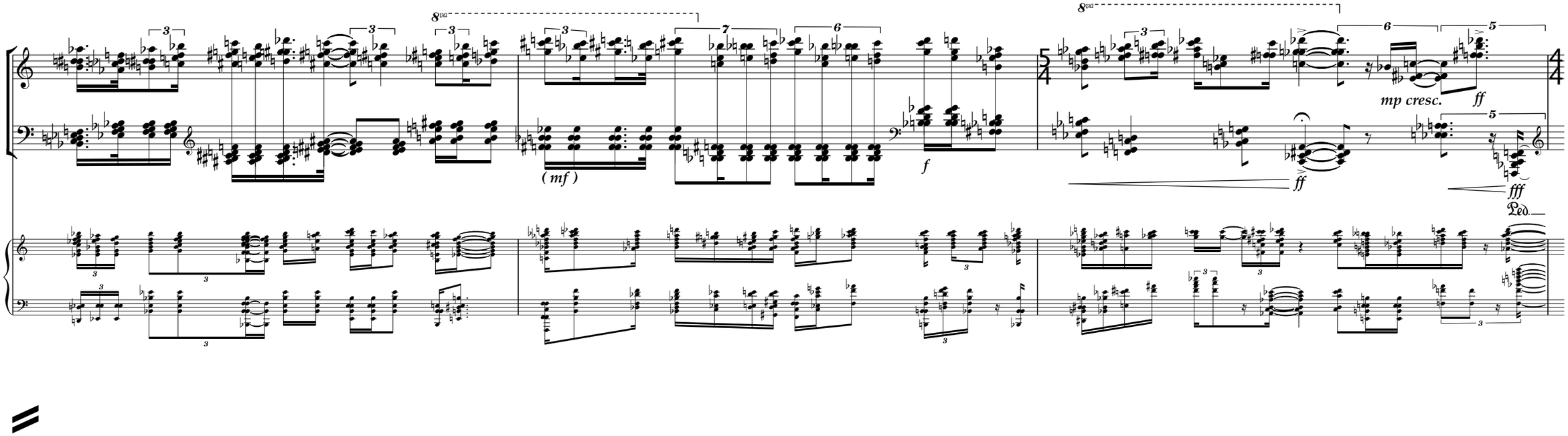
8va

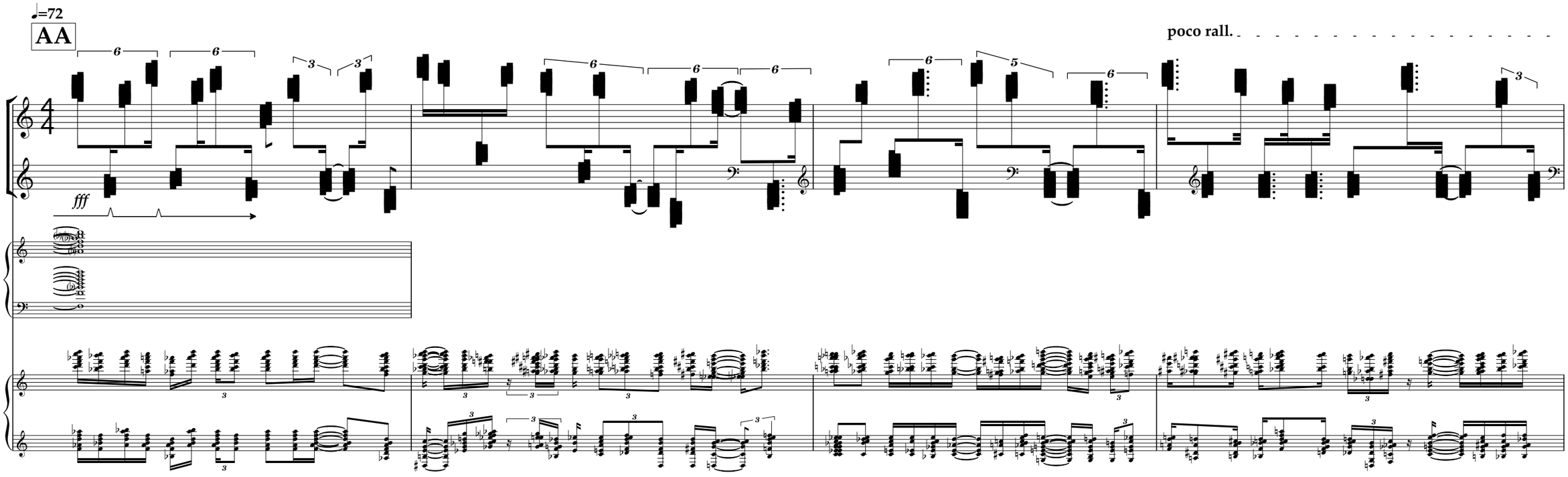
ff

Z

8vb

p cresc. poco a poco


8va
(mf)
f
8va
mp cresc.
ff
ff
fff
Ped.


♩=72
AA
fff
poco rall.

♩=50

R.H. on strings, cluster with palm

the single line corresponds approximately to the register played on keys

BB

dim.

pp

Ped.

Hit the strings in the ambitus of the chords, aleatory.
When the damper pedal is not pressed some will naturally produce sustaining tones, other muted percussions.
Respect the figures as much as possible.

CC hard wooden mallet (snare drum mallet)

♩=68

mf

mp

cresc.

DSP: Granular Resynthesis

f

Ped.

dim.

rall.

♩=60

p

7/4

DD

p espressivo

Ped.

ad lib.

EE R.H. with a plastic card (credit card, etc.)
misurato

pp *sim.*

p

Ped.

ppp *mp* *pp*

DSP: Granular Resynthesis

DSP: Granular Resynthesis

pp

pp

trem. rall.

ad lib.

ad lib. following harmonic aggregates

mp subito

mp subito

mf

pp subito

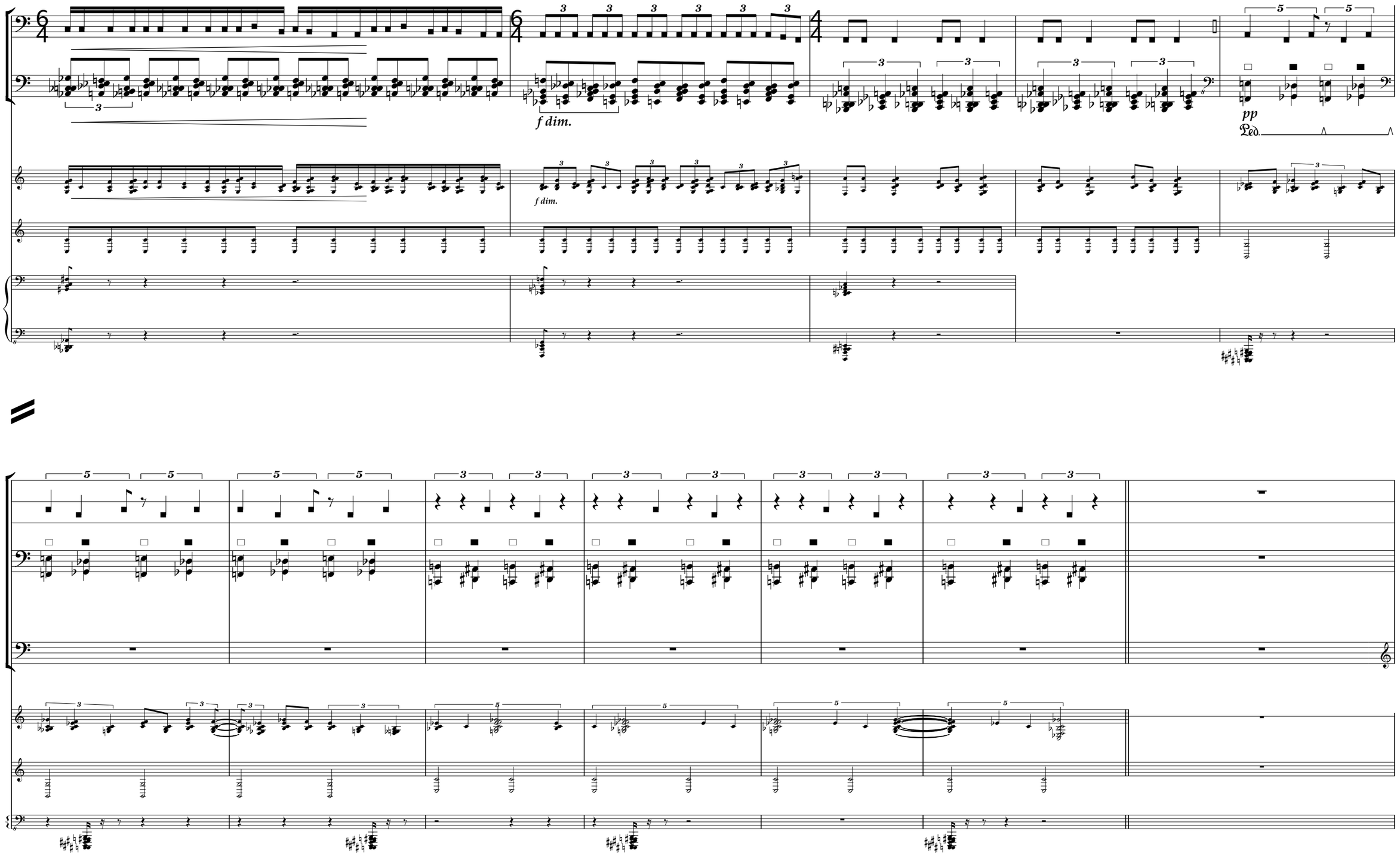
mp

pp cresc.

pp subito

pp cresc.

pp cresc.


f dim.
f dim.
pp
Ped.

FF ♩=60

mp - mf varying

DSP - Attack Detector
"Slice Delay"

pp

p

mp

poco a poco cresc.

f

mf

f

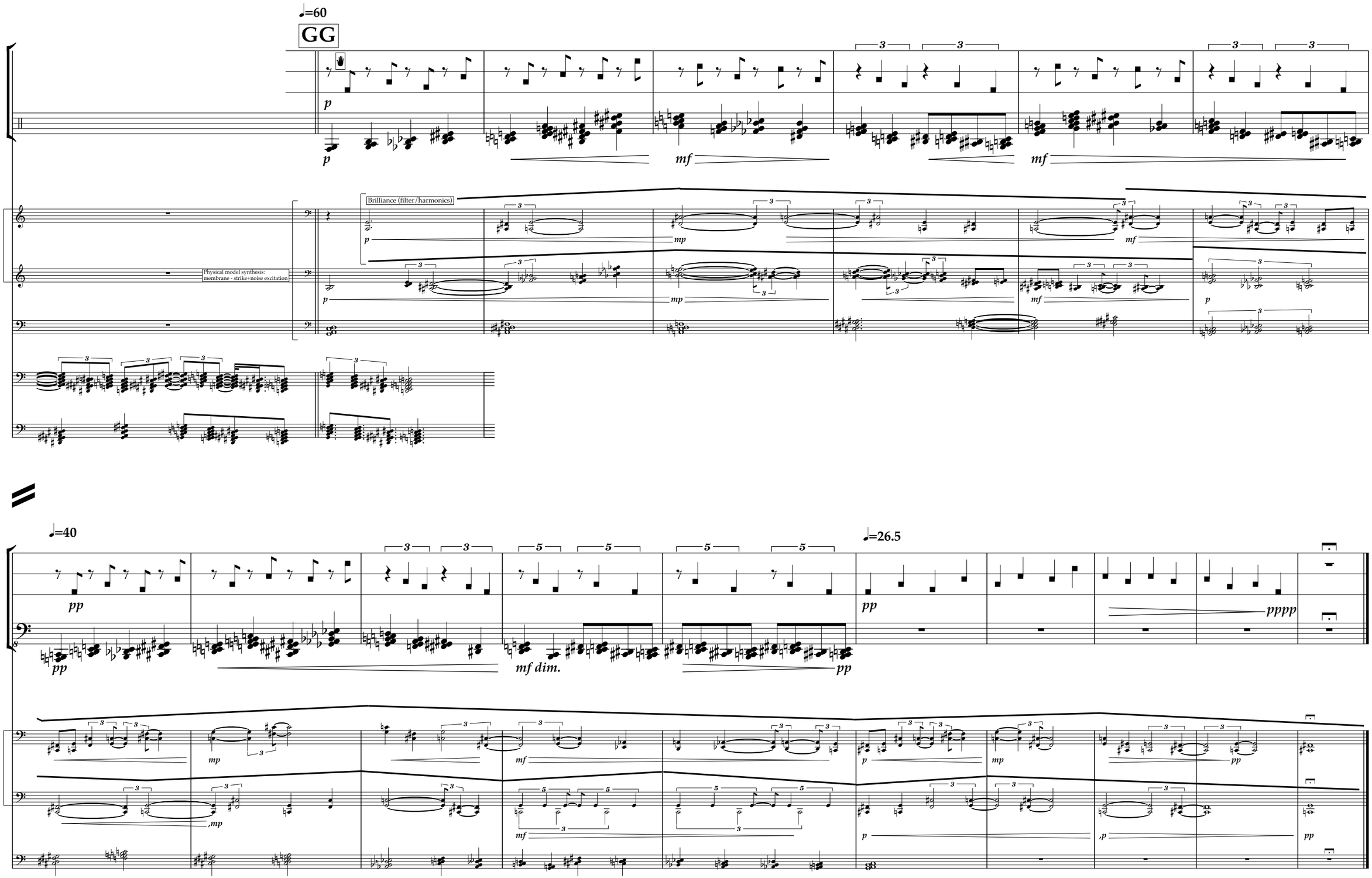
ff

f

ff

mp

p


♩=60
GG
Brilliance (filter/harmonics)
Physical model synthesis:
membrane - strike+noise excitation
♩=40
♩=26.5
mf dim.