

FUTURE LIGHTS

FOR VIOLONCELLO AND LIGHTS

2020

... DESCRIPTION ...

Future Lights is a composition for violoncello and lights in which various lighting effects interact with the performer to create a multisensory experience. Light beams and luminosity change in response to the cello's frequencies, dynamics, and rhythms.

The inspiration for this work comes from two current events. Firstly, the composition is inspired by the culmination of digital lighting technology, which today allows composers to further expand their ideas to stage lighting control.

Secondly, the 2020 pandemic's impact in the performance industry has been motivating streamed concerts, however, these concerts often lack several aspects of the real-world experience. Therefore, an interactive system was designed by the composer for Future Light's première, which went live on the 1st of September 2020 via YouTube. This system allowed live audience interaction through chat messages. The audience was able to change light colours, camera positions and produce "clapping" sounds at the end of the performance, which allowed the audience and performer to feel more engaged with the live aspects of a virtual concert.

Duration: c. 10 min.



• • • PERFORMANCE NOTES • • •

This piece can be performed in a live or virtual setting (i.e. streamed from a studio).

A Max MSP patch for control can be provided by the composer, which allows DMX or virtual lights to be controlled by the cello.

A footswitch pedal must be provided for the performer.

• • • NOTES FOR THE PERFORMER • • •

Always play *rubato* and aim for controlling the lights with the highest precision. Contrasts for low and high brightness should be emphasised through timbre (thus the bowing notation of *sul tasto* and *sul ponticello*).

• • • MINIMUM REQUIREMENTS • • •

- 5 spotlights (real or virtual).
- Lighting system (it can be connected to the internet to allow audience to change light colours or other parameters)
- Light operator.
- Momentary footswitch for performer, connected to lighting system (on/off trigger).

• • • LIGHTING DESIGN • • •

Each section should have a unique sound-light mapping system:

I. One light: Pitch controls Brightness. Holding down the pedal deactivates the pitch detector.

II. One light: Pitch controls Beam Angle.

III. Multiple lights: Pitch controls Beam Angle.

IV. Same as section III. Holding down the pedal deactivates the pitch detector.

V. Same as section I.

VI. Five lights: Spectrum mapping of five frequency bands (300Hz, 600Hz, 1200Hz, 2400Hz and 4800Hz) controls the Brightness of each light.

VII. Multiple side light beams: Amplitude threshold controls random Beam Angles.

VIII. One light: Pitch controls Brightness.

IX. Two lights: Amplitude threshold controls Strobe light effect.

X. Three lights: Amplitude (dynamics) controls Brightness for middle light. The other lights should freely change beam direction. The last harmonic note in the piece should be reserved for pitch detection, for a gradual change of brightness from low to high in all stage lights.

Alternatively, this can be triggered by the control operator.

FUTURE LIGHTS

FOR CELLO AND LIGHTS

♩ = c. 80 *sempre rubato*

① La luminosité

Cello

ped. *mp* *sul tasto e oscuro* *ord* *mf* *gliss.* *ped.* ***

4 *simile*

8

11

13

ped. ***

② Le faisceau lumineux

mf

19

3

③ Mouvement d'étincelle

mp *mf*

29 *pizz.* *arco* *pizz.* *arco*

35 *3* *spiccato* *f*

ped. = hold on fx pedal (momentary switch)

*** = release fx pedal

37

f

④ Jeu de profondeur

48

mf

⑤ La luminosité revient

60

mp

⑥ Scène complète

70

con molto brio

81

con brio

⑦ Lumière rythmique

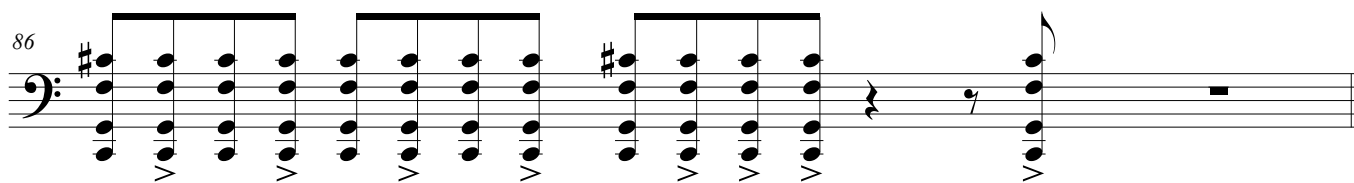
92

f

103

simile

x = percussion sound on the upper bout



8 Facteur de flare

♩ = c. 65
arco



Tempo Primo (♩ = c.80)



9 Stroboscopique



10 Lumières dynamiques



the E harmonic will trigger
full brightness