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Gonalo Gato

Vacuum Instability

for octet

Instruments:

Flute
Clarinet in B \flat , Bass Clarinet in B \flat
Bassoon

Trumpet in B \flat
Tenor Trombone

Viola
Contrabass

Piano

Programme Notes:

Vacuum Instability is a work for an ensemble of eight musicians. The title is derived from a recent news article related to the probable scientific discovery of the Higgs boson: "A concept known as vacuum instability could result, billions of years from now, in a new universe opening up in the present one and replacing it." - BBC News, 19th February 2013. The idea of the inner workings of the Cosmos always fascinated me, and the fact that the universe could 'renew' itself in such a way is just so surprising. I guess these ideas are very similar to ideas about music material's variation and contrast.

London, March 2013

The piece was premiered on 15 March 2013 at the BBC Maida Vale Studios, London. Richard Baker conducted an ensemble comprised of BBC Symphony Orchestra musicians plus Guildhall School of Music and Drama students.

Execution notes:

- Score notated in C.
- Accidentals last one bar and affect only the octave on which they appear.
- Rests outside the staff clarify the duration of the uninterrupted glissandi.
- The letter 'n', used as a dynamic marking, stands for *niente*, meaning silence.

Vacuum Instability

Score in C

Gonçalo Gato

Largo, ♩ = 50

(z - fltzg.)

Flute: *ppp*, *p*, *f*, *pp*
Bass Clarinet in B \flat : *ppp*, *p*, *mf-pp*, *n*
Bassoon: *p*, *ppp*
Trumpet in B \flat : Whispa mute, *p*, *f-pp*, s.v.
Tenor Trombone: Whispa mute, *p*
Viola: *mp*, *mp*, *n*, *p*, s.v., (z - unmeasured tremolo), sul pont., Increase bow pressure ord. sul pont.
Contrabass: *ppp*, *p*, *ff*
Piano: *p*, *pp*, *p*, *f*, *pp*
Ped. Ped.

7

Fl.: *mf*, *p*, *f-p*, s.v. fuse in harmony, *ppp*, *f*, *n*, simile, *ppp*, *f*, *n*, ord., *ppp* < *p*
B. Cl.: *mf*, *p*, *f-p*, *ppp*, *f*, *n*, fuse in harmony, *ppp*, *f*, *n*, simile
Bsn.: *mf*, *p*, *f-p*, s.v. sempre fuse in harmony, *ppp*, *f*, *n*, fuse in harmony, *ppp*, *f*, *n*, fuse in harmony
Tpt.: *p*, *f-pp*, *n*, *mf-ppp*, *ff*, fuse in harmony, *ppp*, fuse in harmony
Tbn.: *p*, *f-pp*, *ppp* < *f*, *n*, *ppp* < *f*, *n*
Vla.: ord., Sul C, *f*, *mp*, *f-p*, s.v. fuse in harmony, *n*, *ff*, *n*, simile, *n* < *ff*, ord., *n*, *mf*, > *n*, s.v.
Cb.: Sul D, *p*, *ppp*, *ff*, *n*, s.v. sempre fuse in harmony, *ppp*, *ff*, *n*, *ppp*
Pno.: *mp*, *f*, *pp*, *fff*, *ff*
8th Ped.

16

Fl. *f* *ppp* *ff* *ppp* *mf*

B. Cl. *mf* *n* *n* *ff* *n* *mf*

Bsn. *mf* *n*

Tpt. *mf* *n* *ppp* *very plain*

Tbn. *ppp* *mf*

Vla. *f* *n* *ff* *n* *n* *f*

Cb. *f* *n* *n* *ff* *n* *n* *f*

Pno. *f* *p* *fff* *ppp*

s.v. sempre
fuse in harmony
simile

24

Fl. *n* *ppp* *mf* *n* *ppp* *ff* *n* *ppp* *mf*

B. Cl. *n* *n* *mf* *n* *n* *ff* *n*

Bsn. *pp* *n*

Tpt. *f* *n*

Tbn. *n* *ppp* *mf* *n* *ppp* *mf* *n*

Vla. *ord.* *sul pont.* *f* *n* *ord.* *ff* *n* *sul pont.* *ord.* *gliss.* *erupt* *pp* *ff*

Cb. *ord.* *sul pont.* *n* *ff* *n* *sul pont.* *ord.* *gliss.*

Pno. *f* *p* *f* *fff* *f* *ppp*

(z - one-note tremolo as fast as possible)

A

Più mosso, ♩ = 60

35 *sober*

Fl. *f* *n* *f* *ppp* *mp* *fade-in from clarinet*

B. Cl. *p* *f* *mf* *n* *p* *n* *fade-in from piano resonance*

Bsn. *p*

Tpt. *pp* *Harmon mute* *Straight mute*

Tbn. *mp*

Vla. *p* *ff* *ord.* *pp* *fff* *ff p* *p* *ff* *pp* *mf* *n* *p* *Sul C* *ppp*

Cb. *fade-in from flute* *n* *fff* *pp* *fff* *ff p*

Pno. *ff* *pp* *f* *8va-1* *like an echo* *ppp* *mf* *ppp* *like an echo*

Red.

42 *very subtle, wavy*

Fl. *pp* *ppp* *mf* *n* *ppp* *f* *f*

Cl. *f* *pp* *ff* *mf* *n* *f* *p* *pp* *f*

Bsn. *ff* *mf* *ppp* *f*

Tpt. *pp* *subtle* *ff* *f* *p*

Tbn. *ff*

Vla. *fff* *p* *f* *mp* *ff* *mp* *f* *n* *Sul pont.* *pp* *f*

Cb. *ff* *Col legno batt.* *Gettato* *Muffle strings* *Sul A* *fade-in from flute* *n* *f* *n* *Sul G* *n* *f*

Pno. *fff* *p* *pp* *p* *f* *firm* *mp* *ppp* *ff* *Silently depress cluster*

Red.

48

Fl. *dying out...* *p* *mf* *p* *tr*

Cl. *n* *f* *pp* *p* *p* *mf* *pp*

Bsn. *firm! and then die out...* *ff* *p* *ppp* *dying out...* *p* *pp*

Tpt. *f* *p* (flttzg.)

Tbn. *f* *pp* *gliss.* *Uninterrupted glissando*

Vla. *Tallone* *fff* *mf* *p* *dying out...* *mf* *pp* *f* *5*

Cb. *Tallone* *fff* *p*

Pno. *p* *mp* *pp* *mf* *p* *like a vortex...* *mp* *5*

Red.

51

Fl. *mf* *f* *leggiero* *p*

Cl. *mf* *To B. Cl.* *Bass Clarinet in Bb* *leggiero* *p*

Bsn. *p* *6* *leggiero* *p*

Tpt. *Straight mute* *f-pp* *f*

Tbn. *mf-pp* *f*

Vla. *p* *p* *ff* *p* *fff* *pizz. leggiero* *mf*

Cb. *p* *p* *fff* *p* *pizz. leggiero*

Pno. *mp* *pp* *f* *p* *ppp* *f firm but lively*

54

Fl. *p* *N ord.* *mf* *p*

B. Cl. *To Cl.* *mf*

Bsn. *vivo* *f* *mp*

Tpt. *leggiere* *p* *N* *mp-p* *H vivo, cantabile* *f*

Tbn. *p* *f-pp* *mf*

Vla. *arco* *n* *f* *n* *ff* *arco battuto* *f* *ff* *pizz.* *f*

Cb. *mp* *Sul A* *p* *f* *mf* *pizz.*

Pno. *mp* *mf* *p* *erupting* *mf* *p*

Sost. Ped. *Ped.*

58

Fl. *vivo, cantabile* *f* *H* *ff* *C*

B. Cl. *Clarinet in Bb* *n* *f* *subtle, leggiere* *p* *mf* *H vivo, cantabile* *f*

Bsn. *erupting* *p* *f* *p* *mf*

Tpt. *leggiere* *pp* *mp*

Tbn. *subtle, leggiere* *pp*

Vla. *f* *arco* *n* *ff* *mp* *Sul pont.* *f* *fff* *p*

Cb. *mp* *erupting* *p*

Pno. *erupting* *f* *mp* *subtle, leggiere* *p* *ff* *ff*

Ped.

63

Fl. *leggiere*
p *mf* *mf*

Cl. *ff* *leggiere*
mf

Bsn. *leggiere*
pp *mf* *mf*

Tpt.

Tbn. *pp*

Vla. *mf* *ord.* *mp* *f* *ff* *vivo*

Cb. *f* *arco* *p*

Pno. *leggiere* *p* *mf* *f* *mf* *p*



67

Fl. *cantabile, sonoro*
mf *f*

Cl. *f* *p*

Bsn. *mp* *pale* *p*

Tpt. *vivo, cantabile*
p *mf*

Tbn. *p*

Vla. *mp* *mf* *punta d'arco, batt.* *leggiere*

Cb. *pizz.* *mp* *arco* *pp*

Pno. *p* *mp* *f* *pale* *mf*

8^{va}

70

Fl. *pale* *mp* *fff*

Cl. *p* *fff*

Bsn. *mf* *p* *fff*

Tpt. *erupting* *p* *f* *mf* *f* *pp* *ff*

Tbn. *ppp* *ff*

Vla. *ord.* *mf* *f* *mp* *fff* *arco ord. Sul G*

Cb. *Col legno battuto.* *mf* *ppp*

Pno. *f* *fff*

Ped.

D

Più mosso, ♩ = 100

74

Fl. *con fuoco* *f*

Cl. *con fuoco* *f*

Bsn. *con fuoco* *f*

Tpt. *austere* *fp* *f*

Tbn. *f*

Vla. *con fuoco* *ff*

Cb. *mf*

Pno. *percussive* *8va* *ff* *softer* *mf* *percussive* *8va* *ff* *mf*

Ped.

78

Fl. *p subito*

Cl. *p subito* *mf*

Bsn. *p subito* *mf* *p*

Tpt.

Tbn. *pp* 3

Vla. *mp* *molto legato*

Cb. *p* *molto legato*

Pno. *ff* *mf* *p* *pp*

81 **E** *molto legato, flowing*

Fl. *f*

Cl. *molto legato, flowing* *f*

Bsn. *molto legato, flowing* *f*

Tpt. Harmon mute *p* *f* *p* *f*

Tbn.

Vla. *molto legato, flowing* *ff*

Cb. *molto legato, flowing* *mf*

Pno. *legato, very fluent* *mp*

83

Fl.

Cl.

Bsn.

Tpt.

Tbn.

Vla.

Cb.

Pno.

p *f* *p* *f*

85

Fl.

Cl.

Bsn.

Tpt.

Tbn.

Vla.

Cb.

Pno.

p *mf*

with subtleness, but present
Gradually open and close.

10

88 *molto legato, flowing*

Fl. *p*

Cl. *molto legato, flowing*
p

Bsn.

Tpt.

Tbn. *senza sord.*
mf

Vla. *flowing*
mf

Cb. *pizz. l.v.*
present, sonorous
f

Pno. *erupting*
p
Ped.

91

Fl. *fff*

Cl. *fff*

Bsn. *flowing*
mf

Tpt.

Tbn. *very subtle, flowing*
gliss.
pp

Vla. *fff*

Cb. *tallone sharp*
ff
arco
molto legato
gliss.
mf

Pno. *vivo, con fuoco*
mf
ff
mf flowing

94 *a little tenser* 11

Fl.

Cl.

Bsn. *f* *mp* *f*

Tpt.

Tbn. *gliss.* *gliss.* *gliss.* *gliss.* *gliss.*

Vla. *a little tenser*

Cb. *gliss.* *gliss.* *gliss.* *gliss.* *gliss.*

Pno.

Uninterrupted glissando

Uninterrupted glissando

97

Fl.

Cl. *f* *f*

Bsn.

Tpt.

Tbn. *mf*

Vla. *con fuoco*

Cb. *pizz.* *f*

Pno.

12

100

Fl.

Cl.

Bsn.

Tpt.

Tbn.

Vla.

Cb.

Pno.

ff

fff

p

Red.

102

Fl.

Cl.

Bsn.

Tpt.

Tbn.

Vla.

Cb.

Pno.

8va

104 *austere*
ff

Fl.

Cl. *austere*
ff

Bsn. *austere*
ff

Tpt. *senza sord.*
f pp *ff* *p* *f pp* *ff* *pp*

Tbn. *senza sord.*
f pp *ff* *p* *f pp* *ff*

Vla. *ord. austere*
fff

Cb. *arco austere*
ff

Pno. *con fuoco*
fff

108 **G** *flowing*

Fl. *f* *pp* *ff* *p* *ff*

Cl. *flowing*
f *p* *ff* *p* *f*

Bsn. *flowing*
f *p* *f*

Tpt.

Tbn.

Vla. *ff* *mp* *ff* *p* *ff*

Cb. *mf*

Pno. *mp* *con fuoco* *f subito* *p subito* *sempre vivo*

8^{va} Ped. Ped.

112

Fl.

Cl.

Bsn.

Tpt.

Tbn.

Vla.

Cb.

Pno.

p

legato sempre

Red.

116

Fl.

Cl.

Bsn.

Tpt.

Tbn.

Vla.

Cb.

Pno.

very plain, pale

n

loco

120 15

Fl. *pp*

Cl. *ff* *dying out...* *p* *dying out...*

Bsn. *pp* *f* *p*

Tpt.

Tbn. *p*

Vla. *mp* *dying out...*

Cb. *p*

Pno. *mf* *mf* *p* *pppp* *pp*

8^{vb} *8^{vb}*

123 *dying out...*

Fl. *mf* *pp*

Cl. *mf* *dying out...*

Bsn. *mf*

Tpt.

Tbn. *mf*

Vla. *mf*

Cb. *mf*

Pno. *mf*

8^{vb}

molto rit.

The musical score consists of eight staves for the following instruments: Flute (Fl.), Clarinet (Cl.), Bassoon (Bsn.), Trumpet (Tpt.), Trombone (Tbn.), Viola (Vla.), Cello (Cb.), and Piano (Pno.).

- Flute (Fl.):** Rests throughout the passage.
- Clarinet (Cl.):** Starts with a *pp* dynamic, playing a short melodic phrase in the first measure, then rests.
- Bassoon (Bsn.):** Rests throughout the passage.
- Trumpet (Tpt.):** Rests throughout the passage.
- Trombone (Tbn.):** Rests throughout the passage.
- Viola (Vla.):** Features a solo with the instruction "solo al fine firmly". The passage begins with a *ff* dynamic, includes several triplets, and concludes with a *p* dynamic followed by a *fff* dynamic.
- Cello (Cb.):** Rests throughout the passage.
- Piano (Pno.):** Rests throughout the passage.