# **Bowed Electrons 2023**

## **Festival and Symposium**

## BE @ UCT 2023 Programme overview

Times: SAST (UTC +2)
Stream: www.sacmmt.com

Venues: SACM S20 and SACM C08

Colour codes: participant(s) live in Cape Town and streamed out of Cape Town

participant(s) live and streamed into and out of Cape Town participant(s) pre-recorded and streamed out of Cape Town

version 2023\_09\_05\_05 information supplied by participants and/or sourced from the www





Staatliche Hochschule für Gestaltung Karlsruhe





MUSIC, TECHNOLOGY AND INNOVATION INSTITUTE FOR SONIC CREATIVITY (MTI<sup>2</sup>)

## Saturday 2 September 2023

09h55

S 20 Opening and welcome

Theo Herbst

10h00

S 20 Paper / Presentation Denise Onen Composing with found sounds

10h30

S 20 Paper / Presentation Jeremy Hart Are we there yet?

Closure versus ending in non-tonal contexts

11h30

S 20 Paper / Presentation Bonga Mosola Raging Against the Machine:

Why humans are not computers and why this is important

12h00

S 20 Paper / Presentation Mpho Molikeng Matsike

12h30

S 20 Paper / Presentation
Lindokuhle Matina
Archiving through the lens
Camagoogle us, the recontextualization

13h00

## C 07 Opening concert

Performances by members of various SACM Outreach Programme groups, Dizu Plaatjies, Matchume Zango and Sumalgy Nuro

14h00

C 07 Paper / Presentation Michael Pelzel Hidden side of the moon 14h30

#### C 07 Paper / Presentation

Miles Warrington

The pipe organ as 'sound object' - materiality and immateriality in electroacoustic music for pipe organ, with a discussion of the work org-an-ic for live electronics and pipe organ (2023)

15h30

C 07 Paper / Presentation Christina Viola Oorebeek Book of Samples 2021-2023

16h00

C 07 Paper / Presentation Hubert Howe Overtone Music

16h30

C 07 Paper / Presentation Leigh Landy

From note-based music to sound-based music to (just) music

17h00

C 07 Opening Keynote Joakim Sandgren Technical solutions in mixed music

19h00

## C 07 Evening concert

Leigh Landy

*To BBC or Not* (2008)

8-channel recording (a binaural version used in this concert) (13'30")

This is the second in the Radio Series and involved several broadcast recordings made over a short period across a variety of BBC radio stations. Whilst composing the piece, I was called by the head of rights at the BBC as he had been warned by the person who commissioned the original French piece in the series that I was undertaking this and I was warned that virtually every sample I was using was illegal, such as all known broadcasters' voices, all logos, the sound of Big Ben, the 'pips' announcing the approach of a new hour and much more.

It consists of five movements that are called:

- I. Good Morning (2.23)
- II. The News? (3.11)
- III. A microphone each and no idea what they're going to say (1.51)
- IV. Musica Nova (2.59)
- V. Etc. (2.45)

As Marcel Duchamp wrote, it's about taking something from daily life and giving it 'a new thought'.

#### Ceci n'est pas une flûte (1990)

flutes, pitch-tracker, sampler, 2 tapes (10'45")

This partly notated, partly improvised score has borrowed and slightly changed a title from a René Magritte painting, *Ceci n'est pas une pipe*, playing on its ambiguity: this is *not* a flute (sometimes the musician, using a pitch-tracker, triggers samples played more loudly than the flute but coming from other instruments); this is not *one* flute as the performer plays several different ones or several layers of flute are heard concurrently. Inspired by music of many cultures' peoples, this work develops like a landscape as experienced during long train trips. Samples are taken, for example, from Bulgarian and African instruments including the valiha from Madagascar and the piece moves between traditional musical and more abstract passages. Jos Zwaanenburg recorded the work on the La Zététique CD (Erasmus WVH 083).

**Hubert Howe** 

### Harmonic Fantasy No. 7 (2023)

fixed media (8'33")

Harmonic Fantasy No. 7 is pure overtone music. Throughout the piece, only overtones that support the harmony of the immediate context are used. The opening section uses only the sixteenth and higher harmonic partials, four octaves above the fundamental, and the second uses partials from the eighth and above, three octaves above the fundamental. Nevertheless, the harmony of these passages is clear because of the partials used. Fundamentals start to appear just before two minutes and remain from then on. Initially, overtones are faded in and out in the manner of a complex envelope, but three minutes into the piece they begin to be attacked individually. A climax is reached at about 5 and a half minutes, when the fading instrument returns. The piece was written in 2023 and synthesized by Csound.

Christina Viola Oorebeek

Book of Samples ONDATE di COLORE (2023)

A kinetic collage (11'37")

Michael Pelzel

Hidden side of the Moon (2020)

 ${\tt Bass\ flute,\ hobo,\ contrabass\ clarinet,\ bassoon,\ harp,\ piano,\ violin,\ cello,}$ 

tuba (14'55")

Mpho Molikeng

**Linong** (2023)

fixed media (16'29")

## **Sunday 3 September 2023**

10h00

S 20 Paper / Presentation

**Lucy Strauss** 

Bioelectric - Data as Composition & Design Material

10h30

S 20 Composition seminars I - III

Joakim Sandgren
The case of Joakim Sandgren

12h30

S 20 Paper / Presentation Dimitri Voudouris CI [N1] – H1e

13h00

#### S 04 Lunch hour concert

Johann Sebastian Bach

'French' Suite' in B minor, BWV 814 (1722) Harpsichord

Allemande Courante Sarabande Anglaise

Minuet I – Minuet II – Minuet I (da capo)

Giaue

The present suite in its earliest form dates from 1722, at that stage written for Bach's wife, Anna Magdalena. Later, the composer's students also had access to these suites. The 'French' attribution is well known to be unreliable, coming about after the composer's death. The so-called 'English' suites are written in a more convincingly 'French' style, so it is perhaps ironic to spot an Anglaise in this French suite in view of what has been stated. However, the Courante in this suite is decidedly French in style, given away by characteristic shifts of metrical emphasis. Plangency pervades the character of this suite, relieved by witticisms in the Courante, Anglaise and Gigue.

Henri Purcell

Suite in G minor, Z 661 (1696)

Harpsichord

Prelude Almand Corant

Saraband

This work is one of eight suites and other miscellany first published a year after the composer's death, titled as *A Choice Collection of Lessons for the Harpsichord or Spinet*. The publication also included pedagogical material directed at novices at the instrument. It is for this reason that Purcell's harpsichord music has yet to hold its place in the concert repertory. The suites themselves are not as voluminous as those by French composers of the same period, though the idiom in which much the present suite is written may be attributed to that of the clavecin school. This is particularly evident in the Corant and

Saraband; the Almand is the most dense from a textural standpoint, brought about by some remarkable writing in the bass register.

Clare Loveday

Harpsichord (2019)

Harpsichord

When I started writing Harpsichord, I struggled to find an expression for the instrument in my setting - an urban, African, 21st century city. The familiar role of the harpsichord in my mind, filigreed, remote, underlying ensembles, simply did not speak to my world. And then I discovered the rhythmic harpsichord, the resonant lower registers that, with the far less resonant upper registers, lent itself to something wild, something muscular, rhythmic play, and a whole lot of vigour. The changing resonance in the different registers delighted me, as did the possibility of Dominic, such a delicate and thoughtful player, interacting with something deeply rhythmic and relentless.

(Notes by Clare Loveday)

Johann Sebastian Bach

Toccata in D major, BWV 912 (1710 - prob.)

Harpsichord

It is not possible to date this Toccata precisely, but scholars generally agree that it (as well as the six others) belongs to the early part of Bach's compositional career. The florid opening section teems with caprice and intrigue, ends on the dominant, and quickly gives way to a prim Allegro section. Then follows the adagio, which at its centre contains an austere fugal section; this eventually unravels to a more improvisatory episode: retaining, perhaps, the caprice of the work's opening. A bubbly fugal gigue brings the work to its close, though after a brief diversion to the tonic minor, formal discipline leads the work back to its home key.

Alan Bush

Suite: On Lawn and Green opus 54 (1960)

Harpsichord

Pavan

Galiard

Air

Longway Set

The Pavane is traditionally the only dance which a Cardinal could participate in publicly. This Pavane has something of the imperiousness of a Renaissance Prince of the Church, with an undertone even of ferocity.

The Galiard invokes the false relations of John Dowland.

The Air is a country-girl's meditation song.

The Longway Set is a type of North County English folk-dance in which many participate. The melody of the opening section is developed from the reel-tine "The Fit's come on me now" (Notes by Alan Bush)

Johan Jacob Froberger

Fantasia sopra ut re mi so la, FbWV 201 (1656)

Harpsichord

Forming part of Froberger's Libro Secondo in 1649 which was presented to the composer's patron, Ferdinand III, this Fantasia has the distinction of being the only work of Froberger's to be published and disseminated before his death. Publication took place in 1650. Keyboard fantasias on the hexachord 'ut re mi fa sol la' had been written by Byrd and Sweelinck some decades before Froberger, but works such as

these, which showcase the intellectual rigour of a given composer, stand as exemplars in pitch organisation, and the resourcefulness demanded of both composer and performer to make the hexachord intelligible in each variation.

14h00

C 07 Paper / Presentation Clare Loveday On not writing electronic music

15h00

C 07 Paper / Presentation
Darius Klišys
Sutartinės in the field of electroacoustic music

16h00

C 07 Paper / Presentation Audrius Plioplys Voynich manuscript explained

In October 2020, I delved into trying to understand the most enigmatic manuscript in the world. I approached this in an unbiased fashion, without prejudicing myself. I gained an overall understanding of the purpose of this manuscript, and realized that it was written in the spirit of Hildegard von Bingen. Over the ensuing two years, I have been able to delve into the published literature and compare notes. This video is a summary of my insights. It was recorded on July 16, 2022. The videographer was Arvydas Reneckis.

17h00

C 07 Mid-conference Keynote William Fourie Sound's Alchemy: Materiality, Traces, and the Archive

19h00

## C 07 Evening concert

Audrius Plioplys

Women's Healing Ritual from the Voynich Manuscript (2020) (3'38")

My exploration into this enigmatic manuscript is explained in the accompanying YouTube video, "Voynich Manuscript Explained" screened earlier today. I took a paragraph from the balneological section and transliterated it using a guide developed by Gerard E. Cheshire. With an online artificial intelligence program, Speechello, the text was converted into spoken language. I selected a female voice and a German intonation.

Dimitri Voudouris

CI[N1]H1e (in 9 parts) (2011 - 2012)

Computer generated composition (10'00")

Behaviour of complex macroscopic systems: examining kinetic flow disturbances occurring in vehicular motion during phantom traffic jam formations in a three-lane uni-directional system. Each group/category is allocated with audio frequency parameters which are assigned to a pitch-to-Midi converter, the pitches were read and turned into a sequence(s) of pitches and rhythms the computer could understand. The

various vehicle velocities were analysed with Fast Fourier Transform software. This gave the harmonic spectra which were used to determine the timbres of the electronic tones. The end result shows a micro timbral transformation of sound, the multitude of data transformed had spectral sonification properties.

Darius Klisys

Sutartinė Green oak leaves (2023) (7'15")

Pierre-Henri Wicomb

### **BLABLABLABLABLAVET** (2021)

Fixed media (5'01")

This electroacoustic piece as a response to Esther Marie's recording of the flautist- composer Michel Blavet's solo flute piece, Gigue en Rondeau, is an electroacoustic work that I have titled BLABLABLABLABLAVET. The work is a compositional contemplation exploring the unfamiliar situation and setup found in this undertaking of creating in tandem with a complete recording of a piece.

BLABLABLABLABLAVET is a work which occupies itself with the concealment of the original recording, unfolding as a playful, cracked collage attempting to keep the Gigue's spirit intact (including a sense of tonal gravity). The original recording underwent filtering (often underscoring frequencies under 700Hz) to emphasise certain notes and highlight internal rhythmical activity. This was part of an approach validated by having the work as a sound documentation (a recording), therefore not an 'abstraction' but an 'actual object' to interact with. So, although the work BLABLABLABLABLAVET plays out as a deliberate, unpredictable obstruction of the original recording, I view it, or its process, as the result of exploring the collaborative possibilities hidden within the work. Its identity partly had to become what it could distribute as a composition-tool generator.

Further compositional activities involved interaction with the flute timbre, which underwent acoustic manipulation, distortion, delay effects and editing. The phrase construction of the original work had a definite influence on BLABLABLABLABLAVET's construction, with the regularity and driving qualities of the Gigue taking on a similar role in this work. The flautist's performance, her rhythmical choices, note durations and pitches were meticulously duplicated to create MIDI data implemented for the triggering of a few virtual instruments. Her playing/performing was therefore 'split' from its musical vehicle, her flute; it transcended its acoustic environment and was 'repurposed', now in a format to be able to drive other electronic instruments/sounds. This 'version' also created the compositional possibility and more control over the dissolving and re-structuring of small rhythmical and pitch elements of the original material, while simultaneously keeping some aspects of the original 'unharmed'.

**Lucy Strauss** 

Signal Space (2023)

data, electrical activity (8'11")

This piece functions as a composition study where I apply the concept of 'data as design material' in music composition. This concept comes from soma-design methodology, where the design process is guided by bodily practices and grounded in a designer's lived experience. In addition to being a complete work on its own, this piece informs the design process for an interactive music system that I am designing.

In this piece, I use data recordings of the electrical activity in my own nervous system produced by my muscle contractions (electromyographic) and heartbeat (electrocardiographic). The composition comprises two sections: In the first section, I use this bioelectric data as sound material. In the second, the data functions as control signals applied to pre-recorded samples of viola audio. The piece begins with a raw sonified electromyographic signal. We hear the signal as it is with very little filtering. Gradually,

a swishing sound reveals itself. This is the same raw signal, but it has been analysed and separated into different frequency bands. We can now understand the raw signal as a rich combination of many bioelectric impulses (known in neuroscience as action-potentials), shooting through multiple muscle fibers all at once. These signals then introduce clicks and glitches in short loops of viola samples by continuously changing the loop start and end points (in the audio tracks). These glitches occasionally cause new synthesized pitches.

Towards the end of the piece, my heartbeat grounds the music in contrast to the chaos of the glitching loops. Finally, only my heartbeat remains. By delving into data as design material I hope to deepen understandings of the underlying bodily processes inside our bodies as living beings. By doing so through music, we can gain nuanced, tacit understandings that may be difficult to articulate with language or quantitative methods.

Joakim Sandgren

pièces à conviction (comp. 2008, rec. 2016, mix 2023) Flute and tape (12'00")

objets saisis (2012) Bass clarinet (7'00")

Denise Onen

The Revolution Will Not Be Televised; It Will Be Live-Streamed (2023)

Multimedia performance (14'03")

(Audio Version) The Revolution Will Not Be Televised; It Will Be Live-Streamed is a multimedia performance written, directed and performed by Koleka Putuma, that explores language (and languaging) used to restrict or obstruct the freedom of expression and information. The performance considers our collective dance with sincere and performed apologies, self-censorship, surveillance, protest, and technology in our daily lives.

## Imvuselelo - The Dancing Mushroom (2023)

Installation (6'32")

Koleka Putuma's The Theatre of Beauty examines the connections between plant medicine, history, memory, and storytelling. The project draws on research on psychedelic and indigenous medicine practices and how they have been used to heal individuals, communities, and generational traumas. Imvuselelo is the first iteration of the Theatre of Beauty project, this installation was at the 2023 National Arts Festival.

In this iteration, directed by Haneem Christian, we find a mushroom at groove. A mushroom vogue dipping past the teepees of psilocybin ceremonies, past the graves of Dimbaza. We hear the whistle as a meditation, as a chorus, as it is passed from mouth to mouth. Our bodies, from and back into the land. Freedom is coming tomorrow. After tears is after tears. Our collective afflictions share a root recorded in the mycelial network.

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## **Monday 4 September 2023**

10h30

C 07 Performance / Presentation Coila-Leah Enderstein Songs from Me to You

Songs from Me to You is a 35 minute experimental performance by Coila-Leah Enderstein, first presented in the Universität der Künste Berlin Sound Studies Master Exhibition in 2022. Through encounters with historical figures and with the help of particular instruments, the piece situates acoustic knowledge production within the frame of coloniality/modernity. With a focus on Germany's imperial period from 1871 - 1918, the performance playfully works as something between a song cycle and a lecture, incorporating decolonial approaches to sound, listening and knowledge.

The performance invokes German scientists Hermann von Helmholtz and Carl Stumpf, who were both based in Berlin for most of their careers. Helmholtz is renowned for his seminal text On the Sensations of Tone as a Physiological Basis for the Theory of Music, while Stumpf is credited as the co-founder of Gestalt psychology, to which his concept of consonance is linked. Songs from Me to You brings the two scientists' work about acoustic phenomena into relation with pianos situated around Berlin, and with an event epitomising European imperialism in the late 19th century known as the "Berlin Conference" or "Congo Conference." The concepts of resonance and interference are treated as material-semiotic entities that bring to light notions of otherness and difference.

Songs from Me to You represents what Rolando Vázquez calls the first stage of colonial critique: to question the universality of the dominant epistemology and expose its assumptions and negations. Songs from Me to You is not simply a critique, but also a vulnerable examination of how the past lives in the present and how coloniality operates in and through the artist personally. The use of theatre and humour are strategies to make this kind of artistic-intellectual engagement sustainable, and accessible to a public.

12h00

#### C 07 In conversation

Tobi Hunke

One perception of production for live-electronic musicians

1. Music Production for 'listening to music'

When performing electronic (dance) music live, a certain sound standard is expected by the audience. This 'sound standard' is set by the listening habits that result from the current production standard for electronic music e.g.

- -mixing and fine-tuning of countless tracks and sub-tracks
- -Audio effects and automations
- -Master compressions and adjustments to LUFS\* loudness targets

Every (bedroom) producer has to be able to apply those in order not to be noticed negatively on Spotify.

#### 2. Music production for live-music performance

For concerts of popular music bands (e.g. rock and jazz bands) the point of sound is important, but only a part of the overall performance. A sound does not have to be (and cannot be) perfectly mixed, it just has to be 'perceptible by eye'. This means specific sounds don't even have to be clearly audible, but can be 'comprehensibly' performed (and staged). The focus from the audience is on the connection between 'movement' and 'sound'.

3. Music performers connect to their audience making their 'production' visible

When performing music: 'production' should be thought of what is the core source of 'producing a sound' as this is what the audience can perceive. When a drummer hits a cymbal = everyone (who sees it) understands the movement and can 'hear' the sound. All the equipment used after that (mics, amplifying + mixing) is just a 2nd step after that which tries to amplify this. Electronic music performers are facing the challenge to find ways to translate making sounds to movement, gestures and something visible which the audience can comprehend.

12h30

C 07 Paper / Presentation Kate de Gruchy Sound and Poesis: Music Technology's Role

13h00

C 07 Lunch hour concert

Tamara Ringas and Kate de Gruchy

Destination Futility (2023)

(12'10")

Tobi Hunke

Egoformation (2023)

(14'22")

14h00

C 07 Paper / Presentation

Spesh Maloney

Multitracking Multi-channel Multi-disciplinary Multimedia - And How Not To Confuse Yourself

15h30

C 07 Paper / Presentation Jonathan Crossley Inhale - Live

16h00

C 07 Paper / Presentation

Cameron Harris and Alison Kearney
Hidden Energies at Encounters with the (im)material:
Incorporating sound at the Wits Art Museum

16h30

C 07 Paper / Presentation

Kathleen Tagg and David Krakauer

Breath & Hammer: The Ties that Bind Us

17h00

C 07 Closing Keynote

**Chris Low** 

Preservation, Mobilisation, Life and Value - Archiving Music: Perspectives from !Khwa ttu, a San Heritage Centre 19h00

### C 07 Evening concert

Kathleen Tagg and David Krakauer, with Video by Jesse Gilbert

Breath & Hammer: The Ties that Bind Us (2019)

Keepers of the Flame: Movement 1: Human Music (2017)

!1-ichiigai collective

Clusterjam (July 18th, 2023)

Damiana Facen, Theo Herbst, Jihye Jang, Alfea Morelli, Pavel Polenz, Matthew Pratt, Julian Vollmert, Yunfei Zhang, Paul Modler Digital Chladni figures by Holger Förterer (13'18")

Live electronics / network-based music

Cameron Harris

Thru the Ether (2023)

Theremin (14'03")

A century ago, Louis Theremin was tasked with developing a surveillance device. An amateur cellist, he realised quite quickly that the way his prototype could turn human gesture into sound had musical potential. The rest is history.

Having spent time over the last few years creating interactive electronic music, I am struck by how I am drawn to the Theremin over other types of more modern gestural controller devices. Works I have created, for example, for X-box Kinnect sensor are now difficult to perform because the version of the sensor I used is now obsolete, but the century-old Theremin is as adaptable and appealing as ever. While in the case of other controllers there always feels for me that there are extra barriers, the Theremin is immediate. Its analogue design also has a character and life that is quite unique. It senses you in the room and starts to react to you, even when you are not expecting it! It is a real presence in one's creative space.

My approach in this work has been to calibrate the amplitude and pitch of the Theremin's sound and via Max for Live allow the Theremin to conduct surveillance on my custom-designed Ableton Live set. I have consciously avoided using the control voltage possibilities of the instrument in order to provide maximum flexibility in the interaction with diverse aspects of my set, which I use in its own right and mixed with the actual sound of the Theremin itself.

CH, Bristol, August 2023

Circuitry-Based Sound

Electronic Live Improvisation (2023)

Tobias Erhardt, Damiana Facen, Jihye Jang, Hoin Ji, Alfea Morelli, Isabella Panigada, Yudong Wang, Jiahui Yong, Yunfei Zhang and Lorenz Schwarz (Circuitry-Based Sound 2023) (9'44")

Circuitry-Based Sound is a transdisciplinary seminar at the University of Arts and Design Karlsruhe, devoted to DIY electronics and performance. This live performance took place in the ZKM Kubus on the 21st of July 2023.

Jonathan Crossley

Inhale - Live: In the Spring; Coming up for Air; Inhale (2023)

Meryl van Noie

Lumarian (2023) Fixed media (6'20")

Welcome to Lumarian, a realm of AI fantasy environmental fiction. The concept was inspired by AI text-to-image. The musical composition, not created by AI, attempts to sonically paint a picture to the listener without displaying one. Imagine a lush planet, dotted with impressive mountain rock pools, water streams, swaying trees, and an abundance of vegetation. A paradise of thriving green forests and cascading waterfalls. "On Lumarian mysterious light streaks that occur in the hours before dawn and dusk captivate inhabitants who pause at the beginning and end of each day to give gratitude to the life force of their planet. Beams of shimmering light dance through the atmosphere, casting a magical glow upon geographic landscapes and water sources. The residents of Lumarian, deeply connected to nature and its preservation, interact with these streaks of light through ancient indigenous commemorations.

The inhabitants of the planet have advanced technology that surpasses that of the 21st-century earth, including extended musical language communication and microtonal musical understanding. Their celebration is solely about the preservation of the planet and all life forces on it, using the scientific, historical, and indigenous knowledge capacity at their disposal to ensure that a balance is retained by all of society. The guardians of Lumarian gather at sunset, chanting in a language unique to their planet, their voices blending in harmony with the sounds of the forest and water droplets of the mountain streams, as they welcome the arrival of the evening light streaks. Lanterns, carried by communities from all walks of life, are filled with fragrant herbs and flowers, symbolising gratitude and respect. This is a regular practice, amplified at seasonal changes, such as solstices or meteor shower celebrations. The guardians seek solutions to problems and debate how to protect their community against forces that aim to unsettle their state of peace. The survival of its people depends on their ability to harness the power of nature to energise their existence and protect their realm from threats to harmony and peace. A delicate balance between light, darkness and energy exists on Lumarian."

This sound work is a fictional realisation of an imagined world created through Al. The composition itself was not created by Al.

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## **Tuesday 5 September 2023**

15h00

C 07 Paper / Presentation

ESMAE. Porto

Rui Penha, Pedro Santos and Bruno Pereira

The use of technology as an artistic means to create new musical instruments and improvisation

15h30

C 07 Paper / Presentation

ESMAE, Porto

Marco Conceição and Nuno Fonseca

Using 3D Audio as a creative tool. SkyDust by SoundParticles

16h30

C 07 Paper / Presentation

ESMAE, Porto Ângela da Ponte

Ensaios Sobre Cantos I - Ad aeternum, sacred music within the electroacoustic context

17h00

C 07 Paper / Presentation

Kamil Hassim

The Water's Edge - intersections of Art, Science and Indigenous knowledge systems

19h00

## C 07 Closing concert

Rui Pena

Pendulum (2012)

flute, bass clarinet, piano, violin, violoncello, realtime video and electronics (08'04")

*Pendulum* is a study on dynamic spatialisation. It was commissioned by *Sond'Ar-te Electric Ensemble* in 2012. Digital models of physical elements are used to generate both spatial and musical gestures, being represented during the performance in a video controlled in realtime by the pianist. These models include simple pendulums, pendulum waves, multi-body gravitational systems and elastic systems.

The main elements explored in pendulum are:

- the symbiosis between musical gesture and spatial gesture, achieved by the generation of the musical material from the spatialisation, thus inverting the traditional order of execution;
- the hypothesis that the perception of movement, both visual and auditory, is conditioned by the
  mental representation of an intuitive physics an explanation for phenomena such as the
  representational momentum, amongst others is explored through the action of easily
  recognisable forces that drive the musical and spatial gestures;
- the hypothesis that patterns emerge in the visual movements can be related to patterns that
  emerge in sound not only by their simultaneity and common fate, but also by the development in
  one domain of expectations built in the other.

### Ângela da Ponte

#### Ensaios Sobre Cantos I - Ad aeternum (2012)

Fixed media (17'02")

Ad Eternum is an electroacoustic piece for eight channels and is part of a group of works called Ensaios Sobre Cantos (Essay on Chants), which investigates the exploration of traditional songs/rituals from his homeland, the Azores, in the electroacoustic context. The title of the work arises from three ancient chants, which make up the core material of the work. This music is sung every first of November, to honor the memory of those loved ones who have passed away. These voices of lament, so extremely expressive, support a long and dramatic form narrative, suggesting different 'soundscapes' and emotions.

19h30

### C 07 Post BE @ UCT 2023 concert

New album preview, deep-listening experience: JONAS REINHARDT + MAXIM STARCKE - Skinchanger

### C 07 In closing

TE (SACM music technology section tech ensemble - Theo Herbst)

Boogskap I Vuurkring - Umjikeleso womlilo I (2023)

Audio (by TH) -visual (by TH), fixed media (5'00")

Boogskap (bowscape) comprises series of works composed for Prof. Dizu Plaatjies. *Umjikeleso womlilo* probes the visual (Dall•E -, Midjourney -, RunwayML - inspired) and auditory (Live Analog device - inspired) vocabularies at the core of the series.

Boogskap informs ongoing applied signal processing research and composition collaborations between the composer and Prof. Plaatjies. It is dedicated to the latter and to those brave enough to propose that we (will) hear the grass sing when sound is deinstitutionalized and decurricularized.

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