

























# BOWED ELECTRONS 2019 FESTIVAL AND SYMPOSIUM PROGRAMME UNIVERSITY OF CAPE TOWN SOUTH AFRICAN COLLEGE OF MUSIC 24-25 AUGUST

## **SATURDAY 24 AUGUST**

## **SESSION 1**

9.30-10.00	Welcome and introductory remarks
10.00-10.45	Al-Jazari's Perpetual Flutes: reflections on the recreation of an early, water-based musical instrument Cara Stacey
10.45-11.30	Improvisation and technology Roland Dahinden, Hildegard Kleeb and Cameron Harris (CubeZ)

11.30-12.00	Intermission: Tea
-------------	-------------------

## **SESSION 2**

12.00-12.45	The Intertwining of My Creativity: (A State of Evolution)  Meryl van Noie
12.45-13.30	The Transmusica project Yseult Jost, Domingos Costa (Duo Jost Costa) and Theo Herbst

13.30-14.30	Intermission: Lunch
-------------	---------------------

## **SESSION 3**

14.30-15.15	Work in progress,,, Joakim Sandgren and Sören Hermansson
15.15-16.00	Room 311: A Hybrid Speaker System for Expanded Immersion Paul Modler

16.00-16.30	Intermission: Tea
-------------	-------------------

#### **SESSION 4**

#### 16.30-17.15

Keynote I: Live electronics – from expressive aim to musical act *Prof. Simon Emmerson* 

I have always composed with electronics - mostly live electronics. For me the technology is a means to help express something - in fact a range of things. My technique has evolved slowly in an interactive relationship with new ideas that the developing technology suggests as well as with the performer and performance practice. Taking examples from over forty years of composing I shall try to show how these relationships have evolved. That is, how does my expressive aim become a musical act?

In the workshop I will focus on some key works in greater detail - and try to show how the musical aims are mapped to the score and electronic processes in composition.

17.15-19.30

Intermission: Dinner

# CONCERT I - C07 SA College of Music 19.30

Bowscape I\*

Theo Herbst

Duo Jost Costa (Piano)

#### **DEFINE**

Sören Hermansson (French Horn)

Per Mårtensson

"Define" for horn and electronics is the first piece of a trilogy. The other two is for violin and oboe (and live electronics in both cases). The oboe piece is still waiting to be completed.

"Define" is based on elaborate timbre work on the live horn transformed in the computer by convolving the signal with pre-recorded classical pieces featuring horn solos. The presence of this historical material varies a lot during the performance of the piece but is more recognisable towards the end of the piece. Other musical material used are different kinds of noise, wobbly tone generators and a fixed pitch sequence used in loop in the live horn part.

The piece is dedicated to Sören Hermansson who also is responsible for the selection of classical horn solos used in the piece.

bifurcations simple

Joakim Sandgren

Soeren Hermansson (French Horn) Joakim Sandgren (Electronics)

I wrote bifurcations simples for Sören Hermansson under an extended period of time. Though I had already used brass instruments the horn presented new conditions. These were solved together with Sören that actually constructed a new type of mouthpiece to play the piece. The composition is in my present aesthetics with undefined pitch and tape, the tape being an electroacoustic shadow behind the musicians.

Performance\* CubeZ

Roland Dahinden (Trombone) Hildegard Kleeb (Piano) Cameron Harris (Electronics)

'CubeZ' is an international collaboration with two of our musicians from Zug, Switzerland and the third member of the trio from the UK, but based in South African for a number of years. Each member brings a distinct background in new music to the group's improvisations. Since its inception the group has performed in Gauteng, Switzerland and the UK. We are excited to make our debut in the Western Cape.

#### \*\*\*Interval\*\*\*

## "Emancipation"

Meryl van Noie

- An extract from Autho(r)ise (2017) with visuals (2019) Meryl van Noie (Electronics and Visuals)

In 2017 Themba Mbuli (choreographer) collaborated with Meryl van Noie, (composer) Thabisa Dinga (musician and dancer), Nkemiseng Khena, Sasha Fourie Myburgh, and Kirsten de Kock (dancers) to create Autho(r)ise: a work about women and their daily struggles for acknowledgement, survival and recognition. It is not so much about violence against women, even though traces of struggle and suffering linger in the work. But rather, this work aims to highlight the strength women have, how they choose to nurture the next generation despite many difficulties, overlook prejudice in favor of survival, or overcome gruelling complexities. It challenges us to consider what they are doing to re-define their position in 21st Century society.

# Displaced: 101 Ways to Long for a Home (after Emma Willemse)\* Michael Blake *Michael Blake (Electronics, Piano and Harpsichord)*

Displaced is a response to the work of Emma Willemse, one of South Africa's most distinguished conceptual artists, in particular her collection of 101 artist books called 'Displaced' which was shown complete at the 2018 Woordfees in Stellenbosch at which she was artist in residence. Her work deals with, among others, issues of displacement and migration, loss and longing, and these have found their way into my piece.

We have in common an interest in the use of 'objets trouvés' in our disciplines, many of Emma's artist books in this collection using discarded parquet flooring for example, and my piece similarly using the sounds of these books which I recorded in her studio, as well as fragments of bow music, choral singing, harpsichord music, percussion music - some from field recordings I have made over the years - and fragments from some of my own pieces time-stretched, transposed, reversed, superimposed etc. The material which the keyboard plays is also found sound, taken from several earlier pieces of mine, and the prepared piano sounds were found samples for which I had to simulate preparations after I had finished the piece.

I also love the fact that back in France 'objets trouvés' is also the phrase for 'lost property', since I no longer remember where some of these sounds came from.

This piece was commissioned by Rudolph Willemse and lasts 26 minutes.

# **SUNDAY 25 AUGUST**

# **SESSION 5**

9.15-10.00	Masterclass Prof. Simon Emmerson
10.00-10.45	Keynote II: the elektrifikation of black culture - how riffs from a revolting makeba to radio bantu may yet make us all nigerians. Neo Muyanga
	hortense spillers informs us that 'black culture' is 'critical culture' because it assumes a posture of protest. she argues, this makes 'black culture' emancipatory for everyone, and not only for ethnically black denizens.
	during my presentation, i will make musical reference to the 'revolting' archive of makeba, in an attempt to elicit
	end.
	a refreshed consideration of the concept of solidarity in these, our fractious times.

10.45-12.00
-------------

# **SESSION 6**

12.00-12.45	Digitizing sound recordings in the Hidden Years archive: a closer look at the reel to reel tapes  Pakama Ncume
12.45-13.30	Dialogue: tapes and traces Theo Herbst and William Fourie

13.30-14.30	Intermission: Lunch
-------------	---------------------

# **SESSION 7**

14.30-15.15	Keychain III Christina-Viola Oorebeek and Liza Joubert
15.15-16.00	About the Books of Co-incidence Anne Graaff and Christopher Culpo

16.00-16.30	Intermission: Tea
-------------	-------------------

#### **SESSION 8**

16.30-18.00	Roundtable discussion
17.15-19.30	Intermission: Dinner

# CONCERT II - C07 SA College of Music 19.30

# Aeolian Simon Emmerson

Simon Emmerson (Electronics)

I had for many years dreamed of a piece based on the idea of Odyssey, that original story of journey – often frustrated – and eventual return. For this version I recorded flute sounds (from piccolo to bass flute), thinking of breath and wind, and the special colours the instruments can produce. In the Odyssey story, Aeolus is 'keeper of the winds' – hence the title Aeolian. In the studio I processed and mixed the recordings into eight short sections – each loosely inspired by a scene from the story. Odysseus is continually blown off course, waylaid by a fabled character or faced with an impossible dilemma in how to move forward. Aeolian was first performed at a concert organised by Musiques et Recherches (Brussels) in February 2016. [SE]

# Keychain III Liza Joubert (Piano and Electronics)

Christina Viola Oorebeek

"Keychain" is inspired by mobiles, sculptured and connected hanging objects, each with its own range of movement and timing. There are seven musical objects in this structure, providing the music heard on the various keyboard instruments, live or sampled, digitally echoed and transformed in the fixed-media, sometimes static, sometimes in a more fluid time.

The repeated 'clap object', the links of the keychain, is made on the case and tines of the toy piano and heard at the beginning of each musical object played on the toy piano in the first six minutes of the piece. In the second part, on acoustic grand piano, the musical objects are heard in reverse order. With the fixed-media woven throughout, a collage-like setting exists in which themes come and go, living apart together. One of the fixed-media segments heard is of the Robot Toy piano, designed by Ranjit Bhatnagar (NY). All of the melodic and harmonic material is derived from the composer's Harmonic Retrograde Cross modes.

# The Book of Co-incidences Christopher Culpo (Piano and Electronics)

Christopher Culpo, Anne Graaff

Artist and Author: Anne Graaff

The artist book, The Books of Co-incidence, is a long ballad in text and image. The sequential poetic text weaves through the images.

The art piece is a palimpsest, created upon the pages of an ancient turn of the century book about art and religion. Now, utilizing art again, the book takes a contemporary look at the nature and content of the religions upon which our civilization is built. In the front piece to the book I describe it:

"A rebellious romp through religions, my Ladies of the Lamp, the many Madonnas"

I use the image of the Madonna, in many guises, as the recurring and linking theme in the work. She is the guide through the labyrinthine pathways of the subject matter, the lady who holds the guiding lamp through the dark forests of tangled ideas and religious ideologies.

This is a mystical work, an attempt to open the door to the inner sanctum, the secret heart of the religious impulse.

Text and image build together the final edifice.

\*\*\*Interval\*\*\*

## Memory Machine Simon Emmerson (Electronics)

Simon Emmerson

Memory Machine is a 'concert installation' piece. It is a variable work which will rarely be heard exactly the same twice. It can be performed in concert or run in a continuous (changing) loop as an installation. The work is in part inspired by mediaeval and renaissance ideas of mapping objects of memory onto an imaginary stage in the mind – most especially as examined in Frances Yates's book The Art of Memory (1966). In some of these 'memory theatres' (in the early 17thC writings of Robert Fludd, for example) there are five doors and five columns which act as 'loci' for the placing of memories. I have used this as a starting point for the spatialisation of sound in this work. Thus (unseen) doors open and close to reveal each memory. There are recordings of soundscapes I have recorded over the past 40 years, also frozen memories of 'modern' music that has some significance to me. Memory Machine was commissioned for the Inventionen Festival Berlin 2010, with the support of the DAAD Berliner Künstlerprogramm.

Now for Triads (2017 - 2018) Ranjit Bhatnagar (Robot toy piano) Liza Joubert (Piano) Pierre-Henri Wicomb

A work for solo Robot Toy Piano (video projection), Acoustic Piano and MIDI soundtrack (virtual keyboard and percussion instruments) composed specifically for the redesigned player toy piano built by the American (Brooklyn) composer/inventor Ranjit Bhatnagar. The title suggests the setting up of a musical environment in which moments, centred around a pitch completing the structure of a triad, establishes the melodic thread audible throughout the work. The triads are dressed as musical motifs of which there are two prominent ones in the work. The individual pitches are often presented as mini sound clouds, which has the auditory result of an indirect, ambiguous pitch.

With this piece a physical environment is created considering the different music making machines displayed: the soundtrack/computer (**audio stereo**) with its unwavering control and precision in executing the musical material/notation, the little less control of the toy piano (**audio left**) generating unforeseen sounds like the retraction noise of the hammers and the pianist (**audio right**), with least control concerning the execution of the instructions/notations, guided by a metronomic click track.

the elektrik-fikation of ooga booga (with respek to makeba and masekela) Neo Muyanga (Instruments and Electronics) Neo Muyanga

\* World premiere



























# BOWED ELECTRONS 2019 FESTIVAL AND SYMPOSIUM PROGRAMME UP SCHOOL OF THE ARTS 27 AUGUST

## **TUESDAY 27 AUGUST**

## **SESSION 1**

9.50-10.00	Welcome and introductory remarks
10.00-10.45	Keynote I: Live electronics – from expressive aim to musical act <i>Prof. Simon Emmerson</i> I have always composed with electronics - mostly live electronics. For me the technology is a means to help express something - in fact a range of things. My technique has evolved slowly in an interactive relationship with new ideas that the developing technology suggests as well as with the performer and performance practice. Taking examples from over forty years of composing I shall try to show how these relationships have evolved. That is, how does my expressive aim become a musical act? In the workshop I will focus on some key works in greater detail - and try to show how the musical aims are mapped to the score and electronic processes in
	composition.
10.45-11.30	Masterclass Prof. Simon Emmerson

11.30-12.00	Intermission: Tea
-------------	-------------------

## **SESSION 2**

12.00-12.45	Presentation: Cara Stacey, Mpho Molikeng
12.45-13.30	Discussion

13.30-14.30	Intermission: Lunch
-------------	---------------------

### CONCERT III 14:30

# Mathematics III from Archimedes a Planetarium Opera Miles Warrington (Electronics)

**James Dashow** 

This is the third and final sequence of mathematical images in ARCHIMEDES, coming in the opera's Finale. Here I let Archimedes speculate on the mathematics and mathematical physics of the 20th and 21st centuries. The images associated with these extraordinary developments, both abstract and physically real, are again given 3-dimensional choreographic life as they dance and gambol around the planetarium dome, always in synchronization with the music whose primary goal is two-fold: generating textures that fully complement the visual realization of the images, and generating different kinds of spaces in which the images move. The spatialization of the sounds is as important compositionally as the invention and transformations of the electronic timbres. The sounds not only move in space, but they are often designed to give the feeling of the movement of space, or of several kinds of spaces with different characteristics that move and evolve contrapuntally.

The graphics sequence begins with Feynman diagrams, the very simple but highly effective imagery designed by Richard Feynman to suggest the interactions of sub-atomic particles. These are followed by cloud chamber images (that were used prior to computer graphics for discovering sub-atomic particles), that transform into representations of chaos, then twistor space and superstring theory emerge, followed by some of the cosmological contemplations of brane theory and its inevitable relationships to relativity. Archimedes is rudely interrupted in his fantastications, and this action takes the opera to its tragic conclusion. In this concert version the interruption is only hinted at (the transformed inharmonic guitar sounds), and the piece ends with Archimedes last, idealistic, vision.

Computer animations/video by Lorenzo Ceccotti.

# Soundings in Pure Duration Nos 2b, 4, 5, 6, & 9 *Miles Warrington (Electronics)*

James Dashow

The title of this series of pieces, Soundings in Pure Duration, comes from Henri Bergson in one of his essays on Time; in the original French the original "Soundings" means only (something like) "inquiries" or "plumbing the depths", which it shares with English. The French doesn't have the play on the word Soundings as does English (you might say it loses something in the original), and so it seems to me a perfect description of my approach to electronic music.

Soundings in Pure Duration n.2b makes use of the considerable surplus of material that was generated for Soundings n. 2a, now subjected to further signal processing, as well as projected into an expanded octophonic space (2a is hexaphonic). As in the earlier piece, the phrasal, timbral and spatial interaction between pre-recorded percussion sounds and electronic sounds are synchronized in the overall structure to create the quite specific form of the work. The electronic manipulation of the percussion sounds allows for the precise realization of complex figurations that would be impossible for live percussionists, particularly the spatialization of these sounds. Timbrally, the electronic sounds, which also move around in precisely designed trajectories, usually in a sort of spatial counterpoint to the movement of the percussion sounds, are designed to partake in the frequency content of the more resonant percussion in order to achieve a close integration of the various sonorous materials. The general form of the piece relies on contrasts mainly in velocities and varying densities of events, i.e. densities of single events and densities of collections of events at all levels, from that of the details to that of the largest formal dimensions. Things alternate between or gradually transform from one to another of these densities, and this is the core of the compositional conception, the part that should be the most immediately perceptible and at the same time, the most fundamental aspect of the work.

**Soundings in Pure Duration n.4** is my first foray into the world of octophonic electronic sounds, rather than my usual hexaphonic. The 8-channel configuration offers greater opportunities for developing

spatialization structures, in particular a more elaborate exploration of my dual conception of movement IN space together with movement OF space. Following the trajectories of the spatial motion is very much like concentrating on the multiple voices in a contrapuntal work; but it is my sense that there is far greater involvement by virtue of the fact that the musical linearity is actually occurring physically around the listener, it is no longer a static experience (the musical lines all coming from the same point in space). It is a pleasure to compose for the viola: its timbral qualities vary from a more intense variation on the violin sound in the upper register to the absolutely unique quality in its lowest register. As such, designing electronic sounds for the viola was a fascinating challenge. And having worked on recent pieces (Soundings n. 2a for percussive sounds, Soundings n.3 for guitar) where the articulation of the principle instruments are made up of hits, points and plucks, it was both a relief and a pleasure to be able to compose for an instrument that can sustain a note for an arbitrary length of time and even produce a continuous crescendo o diminuendo.

Soundings in Pure Duration n.4 is dedicated to violist Luca Sanzò.

**Soundings in Pure Duration n.5,** as the title suggests, is the 5th in the series of "Soundings" compositions, the composer's second foray into octophonic electronics. The work explores timbral and rhythmic interactions between the harp and the electronic sounds as further elaborations of the resources of the Dyad System, now with more intricate spatialization developments following the composer's concept of "movement IN space, movement OF space". The harpist for whom this piece was composed asked that she, too, be spatialized, something the composer is actively considering for a later edition of this piece.

Soundings in Pure Duration n.5 was composed for and dedicated to Lucia Bova.

Soundings in Pure Duration n.6 is all about timbre, time and space. Timbral developments are closely synchronized with the movement of sonic events, structured as variously paced dynamic phrases, in space. Sequences of events are realized in a sort of spatial counterpoint where multiple trajectories of sounds are played simultaneously. The spatial choreography of the several timbral lines attempts to place the listener inside the counterpoint as it moves and transforms around the hall. Composing with space generates a uniquely expressive kind of musical experience that can fully involve the listener in the musical work in genuinely new ways. This particular Soundings continues the composer's explorations in the three principle dimensions of his work: pitch structure, timbre and, especially, spatialization. Timbre is constructed from pitch controlled processes that are in turn derived from a rigorous application of his Dyad System. These structures are then synchronized with various elaborations of the space surrounding the listener: differently sized spaces and spatial zones, often occurring simultaneously as well as in succession are utilized along with multiple trajectories (the "choreography") of the sounds in space. These are all integrated into the complex timbral-spatial conception of the work. And, as usual, the soloist is the focal point of this activity and often the trigger for spatial movement.

**Soundings in Pure Duration n.9.** This particular Soundings continues the composer's explorations in the three principle dimensions of his work: pitch structure, timbre and, especially, spatialization. Timbre is constructed from pitch controlled processes that are in turn derived from a rigorous application of his Dyad System. These structures are then synchronized with various elaborations of the space surrounding the listener: differently sized spaces and spatial zones, often occurring simultaneously as well as in succession are utilized along with multiple trajectories (the "choreography") of the sounds in space. These are all integrated into the complex timbral-spatial conception of the work. And, as usual, the soloist is the focal point of this activity and often the trigger for spatial movement. Soundings in Pure Duration n.9 is written for and dedicated to Manuel Zurria.

16.00-16.30	Intermission: Tea
-------------	-------------------

#### **SESSION 3**

16.30-17.15	UPLOrc (University of Pretoria Laptop Orchestra): A Demonstration/Performance Be-Paired/Pre-Paired Melandri Laubscher, Estevan Khün, Shadé Jansen, Motshwane Pege & Miles Warrington
17.15-18.30	Presentation: ImmerGo system demonstration Sean Devonport

18.30- 20.00	Intermission: Dinner
--------------	----------------------

## CONCERT IV 20.00

# Aeolian Simon Emmerson (Electronics)

Simon Emmerson

I had for many years dreamed of a piece based on the idea of Odyssey, that original story of journey – often frustrated – and eventual return. For this version I recorded flute sounds (from piccolo to bass flute), thinking of breath and wind, and the special colours the instruments can produce. In the Odyssey story, Aeolus is 'keeper of the winds' – hence the title Aeolian. In the studio I processed and mixed the recordings into eight short sections – each loosely inspired by a scene from the story. Odysseus is continually blown off course, waylaid by a fabled character or faced with an impossible dilemma in how to move forward. Aeolian was first performed at a concert organised by Musiques et Recherches (Brussels) in February 2016. [SE]

# Phetolo *Miles Warrington (Electronics)*

Miles Warrington

The Northern Sotho word for 'transformations' is phetolo. Transformation as a central theme in the current academic and social climate in South Africa is a critically important activity that seeks to recognise the inequalities of knowledge and social systems of the past and address them with positive change. In the compositional practice of generating effective material in the discourse of acousmatic, electroacoustic and soundscape art-music forms, the 'transformation' of material through various techniques allows us to establish narrative and aesthetic contexts. The expression of a sound wave, or any signal varying over time, as the sum of its constituent sine waves, is known as the Fourier transform of that signal. The function of the signal varies over time and gives us the means to visualise or express that sound. Images too, can be represented in this way by creating visual graphs of collections of sine waves to form a Fourier transform of the physical image from a greyscale photograph. To this end, six professional photographs were taken of important works of art and architecture around the University of Pretoria campus that speak to social issues of the past and future and used as material to generate matrices of frequency information used in the work. The images were converted to transforms in Matlab by Dr Harry Wiggins from the Mathematics department at the University of Pretoria. Each image is given a specific channel, with the work having a total of six channels, where the images undergo a 'dialogue' of sorts between themselves. The work was commissioned by the Dean of the Faculty of Humanities, Prof Vasu Reddy for the Humanities 100 Anniversary Celebrations this year and received its world premiere at the recently held University of Pretoria Music Festival.

# Untoward\* Cara Stacey (Electronics)

Cara Stacey

'Untoward' is a sonic essay drawing on the sound of a prototype of one of early engineer Al-Jazari's perpetual flute machine designs. This perpetual flute instrument is one of four created and described by scholar and engineer Abu al-Izz Isma'il bin al-Razzaz al-Jazari's text "The Book of Knowledge of Ingenious Mechanical Devices" from between 1204 and 1206. Having created a prototype of this instrument, I sampled sounds from this water-based aerophone instrument as it functions and created a composition from these sounds.

Writing about al-Jazari's work, scholar Gunalan Nadarajan talks about al-Jazari's aim towards "prolonging, intensifying and diversifying the experiences of those who encounter these devices..." (2007: 14). He uses the term 'untoward automation' to describe an inherently aesthetic quality within many of these machines where the hydraulic and air pressured motion is actually rather unpredictable, often resulting in a "surprising flurry of [capricious] movements" (2007: 15). This idea of 'untoward motion' has fascinated me and encouraged the moments of movement and lack thereof in this composition.

Bowscape I

Duo Jost Costa (Piano)

Theo Herbst

#### \*\*\*Interval\*\*\*

## Memory Machine Simon Emmerson (Electronics)

Simon Emmerson

Memory Machine is a 'concert installation' piece. It is a variable work which will rarely be heard exactly the same twice. It can be performed in concert or run in a continuous (changing) loop as an installation. The work is in part inspired by mediaeval and renaissance ideas of mapping objects of memory onto an imaginary stage in the mind – most especially as examined in Frances Yates's book The Art of Memory (1966). In some of these 'memory theatres' (in the early 17thC writings of Robert Fludd, for example) there are five doors and five columns which act as 'loci' for the placing of memories. I have used this as a starting point for the spatialisation of sound in this work. Thus (unseen) doors open and close to reveal each memory. There are recordings of soundscapes I have recorded over the past 40 years, also frozen memories of 'modern' music that has some significance to me. Memory Machine was commissioned for the Inventionen Festival Berlin 2010, with the support of the DAAD Berliner Künstlerprogramm.

Performance
Roland Dahinden (Trombone)
Hildegard Kleeb (Piano)
Cameron Harris (Electronics)

CubeZ

'CubeZ' is an international collaboration with two of our musicians from Zug, Switzerland and the third member of the trio from the UK, but based in South African for a number of years. Each member brings a distinct background in new music to the group's improvisations. Since its inception the group has performed in Gauteng, Switzerland and the UK. We are excited to make our debut in the Western Cape.

<sup>\*</sup> World premiere

























## BOWED ELECTRONS 2019 FESTIVAL AND SYMPOSIUM PROGRAMME WITS SCHOOLS OF ARTS 28 AUGUST

#### **WEDNESDAY 28 AUGUST**

## **SESSION 1: Appollonia Lecture Theatre, Wits School of Arts**

11.30-12.30 Workshop: Prof. Simon Emmerson

# CONCERT V: The Music Room, 8th Floor, University Corner (above Wits Art Museum)

13.15

Untoward
Cara Stacey (Electronics)

Cara Stacey

Untoward' is a sonic essay drawing on the sound of a prototype of one of early engineer Al-Jazari's perpetual flute machine designs. This perpetual flute instrument is one of four created and described by scholar and engineer Abu al-Izz Isma'il bin al-Razzaz al-Jazari's text "The Book of Knowledge of Ingenious Mechanical Devices" from between 1204 and 1206. Having created a prototype of this instrument, I sampled sounds from this water-based aerophone instrument as it functions and created a composition from these sounds.

Writing about al-Jazari's work, scholar Gunalan Nadarajan talks about al-Jazari's aim towards "prolonging, intensifying and diversifying the experiences of those who encounter these devices..." (2007: 14). He uses the term 'untoward automation' to describe an inherently aesthetic quality within many of these machines where the hydraulic and air pressured motion is actually rather unpredictable, often resulting in a "surprising flurry of [capricious] movements" (2007: 15). This idea of 'untoward motion' has fascinated me and encouraged the moments of movement and lack thereof in this composition.

The Book of Co-incidences Christopher Culpo (Piano)

Christopher Culpo, Anne Graaff

Artist and Author: Anne Graaff

The artist book, The Books of Co-incidence, is a long ballad in text and image. The sequential poetic text weaves through the images.

The art piece is a palimpsest, created upon the pages of an ancient turn of the century book about art and religion. Now, utilizing art again, the book takes a contemporary look at the nature and content of the religions upon which our civilization is built. In the front piece to the book I describe it:

"A rebellious romp through religions, my Ladies of the Lamp, the many Madonnas"

I use the image of the Madonna, in many guises, as the recurring and linking theme in the work. She is the guide through the labyrinthine pathways of the subject matter, the lady who holds the guiding lamp through the dark forests of tangled ideas and religious ideologies.

This is a mystical work, an attempt to open the door to the inner sanctum, the secret heart of the religious impulse.

Text and image build together the final edifice.

#### SESSION 2: Drama for Life Resource Centre, 21st Floor, University Corner

14.30-15.40	Keynote Seminar: Live electronics – from expressive aim to musical act Prof. Simon Emmerson
15.40-15.50	Tea
15.50-17.00	Keynote Seminar: Discussion of topics raised during the symposium Neo Muyanga

# CONCERT VI: The Music Room, 8th Floor, University Corner 20.00

Aeolian Simon Emmerson

Simon Emmerson (Electronics)

I had for many years dreamed of a piece based on the idea of Odyssey, that original story of journey – often frustrated – and eventual return. For this version I recorded flute sounds (from piccolo to bass flute), thinking of breath and wind, and the special colours the instruments can produce. In the Odyssey story, Aeolus is 'keeper of the winds' – hence the title Aeolian. In the studio I processed and mixed the recordings into eight short sections – each loosely inspired by a scene from the story. Odysseus is continually blown off course, waylaid by a fabled character or faced with an impossible dilemma in how to move forward. Aeolian was first performed at a concert organised by Musiques et Recherches (Brussels) in February 2016. [SE]

Improvisation\* CubeZ Roland Dahinden (Trombone)

Cameron Harris (Electronics)

Hildegard Kleeb (Piano)

'CubeZ' is an international collaboration with two of our musicians from Zug, Switzerland and the third member of the trio from the UK, but based in South African for a number of years. Each member brings a distinct background in new music to the group's improvisations. Since its inception the group has performed in Gauteng, Switzerland and the UK. We are excited to make our debut in the Western Cape.

Performance\*

Cara Stacey (African Instruments)
Mpho Molikeng (African instruments)
Jonathan Crossley (Guitar and electronics)

Jonathan Sweetman (Drums)

The elektrik-fikation of ooga booga (with respek to Makeba and Masekela)

Neo Muyanga (Instruments and Electronics)

Neo Muyanga

\*\*\*Interval\*\*\*

Bowscape I	Theo Herbst
Duo Jost Costa (Piano)	

## Memory Machine Simon Emmerson (Electronics)

Simon Emmerson

Memory Machine is a 'concert installation' piece. It is a variable work which will rarely be heard exactly the same twice. It can be performed in concert or run in a continuous (changing) loop as an installation. The work is in part inspired by mediaeval and renaissance ideas of mapping objects of memory onto an imaginary stage in the mind – most especially as examined in Frances Yates's book The Art of Memory (1966). In some of these 'memory theatres' (in the early 17thC writings of Robert Fludd, for example) there are five doors and five columns which act as 'loci' for the placing of memories. I have used this as a starting point for the spatialisation of sound in this work. Thus (unseen) doors open and close to reveal each memory. There are recordings of soundscapes I have recorded over the past 40 years, also frozen memories of 'modern' music that has some significance to me. Memory Machine was commissioned for the Inventionen Festival Berlin 2010, with the support of the DAAD Berliner Künstlerprogramm.

<sup>\*</sup> World premiere

#### **BIOGRAPHIES**

Michael Blake (b. 1951, Cape Town) is largely self-taught as a composer; his work is associated with conceptual art and the beginning of an experimental music movement in South Africa in the 1970s. In 1976 he began a series of pieces based on African composition techniques, continuing more recently to explore a postmodern aesthetic in a range of different styles. After spending 20 years in London, he returned to South Africa in 1998, establishing the ISCM South African Section (NewMusicSA), New Music Indaba and Sterkfontein Composers Meeting. From 2002-2009 he curated The Bow Project – string quartet reimaginings of Nofinishi Dywili's uhadi songs by South African composers - culminating in a double CD on the TUTL label. His music has recently been played at Festival d'Automne à Paris, Ars Musica Belgium and the ISCM World Music Days in Slovenia. His music is recorded on a dozen or so CDs, and a Wergo recording of his cello music with Friedrich Gauwerky and Daan Vandewalle was released in April 2018. Having taught at Goldsmiths College London, Rhodes University and Unisa, he currently divides his time between his home, in France, and South Africa where he is Honorary Professor of Experimental Composition in the Africa Open Institute for Music, Research and Innovation at Stellenbosch University.

**Jonathan Crossley**, Northern Irish by birth, South African by life, is a versatile musician, performer, educator and composer with a specialised interest in contemporary musical cultures and technologies.

His musical practice ranges from classical guitar to improvisation, jazz through to electronic music and sonic experimentation. His outputs have included albums such as the chamber jazz album 'My Friends and I' (2004) to the rock/funk albums 'Funk for the Shaolin Monk' (2007) and 'Got Funk Will Travel' (2009) the experimental album 'What if the Machines Spoke Back to You' (2018), 'The Settlement' with Mpho Molikeng (2018), 'Blipz' with Reza Khota and Jonno Sweetman (2018) and the EP by his project 'Deep Spacer' (2019).

He has relentlessly pursued innovation in not only the use of the guitar and technological systems but in the application of these technologies in recording and looping practices. His PhD research led to the development of an extended guitar system or hyper-instrument, the Cyber-Guitar, which extended the capacities of the traditional electric guitar beyond the use of the hands, encompassing the joints of the upper body through the use of a mechanical exoskeleton. (Concert performances can be viewed on You Tube).

He is currently working on a collaborative projective with visual experimenters 'Dryfsand' fusing visual narratives and improvisations with the closed electronic ecology of Deep Spacer.

**Christopher Culpo** is a performer and composer whose work lies at the confluence of contemporary classical music, jazz, and free improvisation. He has written chamber and symphonic music, vocal and opera, for the dance and the theatre, and has composed and improvised music for silent films. Culpo has earned degrees in composition from Boston University and The Juilliard School, where he studied amongst others with Milton Babbitt and David del Tredici. He also studied piano and improvisation with

Charles Banacos. Following his studies at The Juilliard School Mr. Culpo was personal assistant to Aaron Copland and an active Teaching Artist for the Lincoln Center Institute. Since receiving a Fulbright scholarship to work with Tristan Murail in Paris in 1991, Mr. Culpo has lived and worked in France. His performing career has taken him on stages as diverse as the Cluny Jazz Festival, Jazz at Domergue, Rhino Jazz (France), Blossoms Festival (Belgium), The Old Town House in Cape Town and the Prince Albert Showroom Theatre, (South Africa), Musicafoscari/San Servolo Jazz Fest Venezia (Italy), the Radar Festival, Festival Eurojazz (Mexico), the Adelaide Cabaret Festival and the Sydney Opera House (Australia), or the Christchurch Festival (New Zealand). Christopher Culpo has released several albums, most recently *Thawing Mammoth* with clarinetist - saxophonist Achille Succi and tuba player Glauco Benedetti and *The Spectral Life of Things* with saxophonist Catherine Sikora. Culpo's music is published by Les Editions Le Chant du Monde and Editions Musicales Contemporain.

Roland Dahinden is a trombonist and composer. Born in 1962 in Zug, Switzerland, he studied trombone, composition and conducting at Musikhochschule Graz (Georg F. Haas), Scuola di Musica di Fiesole (Vinko Globokar), Wesleyan University Connecticut (Anthony Braxton, Alvin Lucier) and Birmingham University England (Vic Hoyland). As a trombonist he specialises in the performance of contemporary music and improvisation/jazz. He has performed throughout Europe, in America, Africa and Asia. Notable performance collaborators include Anthony Braxton, Miles Davis, Pièrre Favre, George Gruntz and Quincy Jones.

Composers who have written compositions for Dahinden include Peter Ablinger, Maria de Alvear, Anthony Braxton, John Cage, Peter Hansen, Hauke Harder, Bernhard Lang, Joelle Léandre, Alvin Lucier, Chris Newman, Pauline Oliveros, Hans Otte, Lars Sandberg, Wolfgang von Schweinitz, Daniel Wolf and Christian Wolff and since 1987 he has worked in the duo with pianist Hildegard Kleeb.

As a composer he has collaborated with visual artists Andreas Brandt, Stéphane Brunner, Daniel Buren, Rudolf de Crignis, Philippe Deléglise, Inge Dick, Rainer Grodnick, Lali Johne, Sol LeWitt, Lisa Schiess, Guido Baselgia, with the architects Morger & Degelo, and with the author Eugen Gomringer exhibitions with sound installations and sculptors in Europe and America.

His music and performances have been released on numerous labels including Leo Records London, Mode Rec. NYC, Hat Hut Basel, Col Legno Vienna, Lovely Music NYC, Black Saint Milano, Creative Works Zurich, Warner Bros. NYC, Zytglogge Berne, Splash Rec. Roma, Klangschnitte Graz, World Music Cologna, Braxton House NYC, Amadeo PloyGram Vienna, MGB Zurich.

For a full biography and further information, please visit: http://www.roland-dahinden.ch

James Dashow has had commissions, awards and grants from the Bourges International Festival of Experimental Music, the Guggenheim Memorial Foundation, Linz Ars Electronica Festival, the Fromm Foundation, the Biennale di Venezia, the USA National Endowment for the Arts, RAI (Italian National Radio), the American Academy and Institute of Arts and Letters, the Rockefeller Foundation, Il Cantiere Internazionale d'Arte (Montepulciano, Italy), the Koussevitzky Foundation, Prague Musica Nova, and the Harvard Musical Association of Boston. In 2000, he was awarded the prestigious

Prix Magistere at the 30th Festival International de Musique et d'Art Sonore Electroacoustiques in Bourges.

A pioneer in the field of computer music, Dashow was one of the founders of the Centro di Sonologia Computazionale at the University of Padova, where he composed the first works of computer music in Italy; he has taught at MIT, Princeton University, the Centro para la Difusion di Musica Contemporanea in Madrid and the Musica Viva Festival in Lisbon; he was invited by the Conservatorio di Musica Benedetto Marcello in Venezia to teach an intensive series of workshop/masterclasses in digital sound synthesis techniques applied in particular to compositional practices, and to various aspects of the spatialization of sound. <a href="http://www.jamesdashow.net">http://www.jamesdashow.net</a>

#### **Duo Jost-Costa**

The piano duo Jost-Costa, namely **Yseult Jost** (France) and **Domingos Costa** (Portugal), is the winner of the Grieg Competition in Oslo, and both are fellows of the Yehudi Menuhin Foundation. They already made guest appearances in the Festival International de Musique de Besançon, in the Auditorium Stravinski Montreux (Switzerland), Maison Heinrich Heine de Paris, in the theatre TAPS de Strasbourg, the theatres in Montbéliard, Besançon, Dole, in the Wilhelma Theatre Stuttgart and in the great hall of the Academy of Music, Oslo. In recent years, the duo has attracted attention with innovative thematic programmes, bring together music, lyrics and acting: Claude Debussy (2012), Francis Poulenc, Richard Wagner (2013) and the First World War (2014).

**Simon Emmerson** is Professor at De Montfort University, Leicester UK, composer and writer on electronic music since the early 1970s. He founded the studio at City University London in 1975 where he remained until 2004. He was founder Secretary of the Electro-Acoustic Music Association (EMAS) in 1979 as well as later Board member of Sonic Arts Network (to 2004) and Sound and Music (to 2013). He was Edgard Varese Visiting Professor at TU, Berlin (2009-10). Commissions include: GRM (Paris), Inventionen (Berlin), Sond-Arte Ensemble (Lisbon). Recordings: Sargasso. Writings include: *The Language of Electroacoustic Music* (1986), *Living Electronic Music* (2007), *The Routledge Research Companion to Electronic Music* (2018). Keynotes include: International Computer Music Conference 2011 (Huddersfield), Music Science Technology 2012 (São Paulo), WOCMAT 2012 (Taiwan), Alternative Histories of Electronic Music 2016 (London) - and now Bowed Electrons (2019).

Anne Graaff, a South African/British artist, art historian and poet, lives in France. In her artwork, she is a painter and maker of artists' books. (Her Fine Art MA thesis, on contemporary book art, informs her practice). An art historian, specializing in Outsider Art, she has written two books, published by Penguin, South Africa. Her poetry is published in various publications, including Carapace, Stanzas, and the anthologies of African poetry, Africa, My Africa! And Absolute Africa! (Sun Publishers). Recent exhibitions of her artist's' books and paintings include the Paris exhibition, curated by Caroline Corre, *Elles métamorphosent le Livre II* at the gallery, Espace des Femmes, a solo exhibition of artists books, *The Fan Books*, at Atelier de la Main d'Or, Paris, and

work in the group shows, *Be:e*, at la Porte Peintre, France, *My Mother's Garden*, Parts and Labor Gallery Johannesburg, the exhibitions *Domestic Departures* and Mixed Metaphors at the Kalk Bay Modern, Cape Town and *Art/Out of the Ordinary* at the AVA Gallery, Cape Town.

Cameron Harris studied composition at the Universities of Edinburgh, Manchester and Pennsylvania during which time his teachers included Nigel Osborne, John Casken, Edward Harper, James Primosch and Jay Reise. He was a Thouron fellow at the University of Pennsylvania and later the recipient of a Benjamin Franklin scholarship. He won the Network for New Music composition competition in Philadelphia and the David Halstead Music Prize for composition at the University of Pennsylvania. Originally from the UK, Cameron has been based in South Africa since 2006 where he lectures in music at the University of the Witwatersrand in Johannesburg. He was Chair of NewMusicSA, the South African section of the International Society for Contemporary Music, from 2007 - 2011 and curated many festivals for the organization. His main interests are interactive electronic music composition and the history of electronic music.

Theo Herbst holds a BMus degree from Stellenbosch University (1986) and an MMus (Composition) from the University of KwaZulu-Natal (1988). He continued his composition studies with Erhard Karkoschka and Ulrich Süße at the *Staatliche Hochschule für Musik und Darstellende Kunst* in Stuttgart, graduating in 1993. From 1994 Herbst lectured at the Music Department of Stellenbosch University, where he established a music technology programme and served as musical director of the KEMUS-ensemble. In 2013 Herbst was appointed to the South African College of Music, University of Cape Town as Senior Lecturer. Here he has been expanding the existing music technology programme and facilities (www.sacmmt.com). He remains an active composer and explores musical acculturation in his doctoral research.

**Sören Hermansson** is internationally known as a performer, recording artist and educator. He studied in Stockholm, Amsterdam and West-Berlin (Karajan-Academy) and has held orchestral positions in Norrköping Symphony Orchestra and Gothenburg Symphony Orchestra. Since 1988, Sören Hermansson has devoted his time to his solo career and teaching. His performances has brought him to North and South America, and to several countries in Europe. He has been teaching at Academy of Music and Drama, University of Gothenburg,

He has been teaching at Academy of Music and Drama, University of Gothenburg, Ingesund School of Music, Guest professor at University of Wisconsin, Madison, and between 1999-2006 Horn Professor at School of Music, University of Michigan, Ann Arbor.

He has given Masterclasses all over the US, in Europe, and is a frequent guest in Brazil. He is currently teaching at the Chamber Music Programme at Mälardalen University, Västerås. He has done several recordings on BIS, Phono Suecia, Caprice, FINLANDIA labels. For the last 10 years his focus is on commissioning new repertoire for Horn and Electronics. www.sorenhermansson.com

**Hildegard Kleeb** is a pianist who lives and works in Zug, Switzerland. Kleeb studied with Eric Gaudibert in Geneva and Jürg Wyttenbach in Basel and since 1987 has performed throughout Europe, in America and Asia (including China, Singapore and Japan). This is her third South African tour.

She has collaborated with many musicians including Pelayo Arrizabalaga, Vincent Barras, Anthony Braxton, Roland Dahinden, Jacques Demierre, Fritz Hauser, Carlo Mombelli, Dimitrios Polisoidis, Satoko Inoue and has also collaborated with visual and performance artists, such as Inge Dick, Stéphane Brunner, Philippe Deléglise, Lali Johne, Dorothea Rust and Charbel Ackermann.

Known as an interpreter of contemporary music and improvisation, Kleeb has appeared at the Archipel Festival Genève, Lucerne Festival, Donaueschinger Musiktage, Kunsthalle Basel, Knitting Factory NYC, Steirischer Herbst Graz, Musiktage Rümlingen, Merkin Concert Hall NYC, The Kitchen NYC, Madrid Concert Hall, Ballhaus Berlin, Yale University Gallery, Porgy and Bess Wien, taktlos Festival Zürich, Kaleidophon Ulrichsberg, Museu d'art contemporani Barcelona. In South Africa, she has appeared at the Edge of wrong and New Music Indaba festivals. "...an implausibly muted touch and Hildegard Kleeb's contained but alive rhythmic bounce always brings me back to her exacting blueprint." Philip Clark, wire, June 2009

For a full biography and more information, please visit: <a href="http://www.hildegard-kleeb.ch">http://www.hildegard-kleeb.ch</a>

**Neo Muyanga** is a composer, musician and sound artist. He was born and raised in Soweto during the 1970's and 80's - a background that remains the prism through which he views the world today. His work to date centres voice, positing it as a vector that helps us read history and other archives of coloniality. His performances and site-responsive productions are propagated using a genre-diffuse aesthetic that straddles new opera, improv jazz and the music idioms of the Zulu and Basotho. His previous collaborations include the co-founding (with Ntone Edjabe) of the Pan African Space Station - a platform that hosts cutting-edge Pan African music and sound art on the internet. His published albums include: *Blk Sonshine* (1999); *the Listening Room* (2003); *Fire, Famine Plague and Earthquake* (2007); *Good Life* (2009); *Dipalo* (2011); *Toro tse Sekete* (2015); and *Second-hand reading* (2016) (composed for a William Kentridge flip-book film of the same name).

His live productions include the music plays, *Memory of how it feels* (2010), *The Flower of Shembe* (2012) and *The Heart of Redness* (2015) (an operatic adaptation of the novel written by Zakes Mda).

His brief oratorio *MAKEdbA* - conceived as a sonic ode to both Miriam Makeba and Queen Makeda of Ethiopia - was a featured sound installation during the 14th Sharjah Art Bienale in the United Arab Emirates (2019)

His published articles include: A Revolting Eighties R(e)collection (included in A Labour of Love, eds. Yvette Mutumba and Gabi Ngcobo, 2016. Weltkulturen Museum, Frankfurt); Songs in the Key of Revolution (included in Violence - Humans in Dark Times, eds. Brad Evan and Natasha Lennard, 2018. City Lights, San Francisco); Voicing Fluid Voices: Reflections of the multivalence of voice in Miriam Makeba's art and life (included in South African Theatre Journal, eds. Mark Fleishman and Sruti Bala, 2019. Taylor & Francis, Oxford). Neo is an alumnus of the Berliner Künstlerprogramm des DAAD in Berlin, Germany (2016). He was a Composer-in-residence of the

Johannesburg International Mozart Festival (2017) and the National Arts Festival of South Africa (2017). He tours widely both as a solo performer, bandleader, choir conductor. He is a research affiliate at the University of Cape Town's Centre for Theatre, Dance and Performance Studies.

#### **Christina Viola Oorebeek**

Not the 'new' for novelty's sake, but an open mind and extreme curiosity for what's happening around her and the need to evolve and renew a personal aesthetic are the motivations behind Christina Viola Oorebeek's work.

A trip to Las Vegas to record *one-arm bandits* for a music-theatrical piece; developing new instruments *'the soundwheel', plexiphone, midi-toy piano*; writing story and libretto for her chamber opera *"The Pitchshifter"*, making music for flying kite, percussion and live electronics *"tempus fugit"* belong to the work of someone composing with a lack of adherence to convention, but cherishing a great love for histories and traditions. An American-Dutch composer leaving the US in '69 after singing in the 60's band Dan Hicks and his Hot Licks, she tried her hand at writing songs. Having alighted in Amsterdam in '72, and after years as an improvising dance musician and 'rhythm for dance' teacher, she started composing autonomous music. At 50, she embarked on a career in composition, studied with Klaas de Vries in Rotterdam, graduated with the Composition Prize and has been composing ever since.

Joakim Sandgren, born 1965 in Stockholm. He studied composition at the Royal College of Music in Stockholm from 1991 to 1998. 2000 he completed the computer assisted composition course at Ircam. 2003 he presented his Master 2 at the Paris 8 University under Horacio Vaggione. His compositions has been performed by Ensemble Itinéraire, Ensemble 2e2m, Court circuit, Taller Sonoro, Soyoz 21, Archaeus, Champ d'Action, In Extremis, Tokyo Gen'On Project, Modern Music Ensemble (Sydney), Curious Chamber Players, NEO, Ars Nova, Gageego!, Mimitabu, MA, Sveriges Radio Symfoniorkester and in festivals as Darmstadt International Summer Courses, Warsaw Autumn, ISCM, Les Musiques, SoundofStockholm. Since 1998 Sandgren compose in his house developed composition environment in LISP. 2008 he started a suite of fifteen pieces for different formations and multi-track electronics.

Sandgren has composed computer-assisted since 1997. Since 2003, his music has been entirely oriented toward working on secondary sounds of instruments. These sounds are often of a very low intensity and often have to be enlarged using microphones. The way the compositions are designed is reminiscent of an "instrumental granular synthesis". Even if instrumental, Sandgren's compositions are conceived and composed in the way that we compose electroacoustic music. Since 2007 he has been working on a series of mixed pieces (for musicians and computer).

**Cara Stacey** is a South African musician, composer and researcher. She is a pianist and plays southern African musical bows (umrhubhe, uhadi, makhweyane). Cara holds a doctorate in African music, investigating the makhweyane musical bow from the kingdom of Eswatini (University of Cape Town/SOAS). Cara is the founder of the Betwixt concert series and is the International Council for Traditional Music National Liaison Officer for Eswatini.

Beyond her solo work, Cara collaborates with percussionist and drummer Sarathy Korwar in the project Pergola and is a member of the Night Light Collective. Her debut album 'Things that grow' features Shabaka Hutchings, Seb Rochford, Ruth Goller, and Crewdson (September 2015, Kit Records). Her latest album, 'Ceder', is of her duo project with Peruvian flutist and composer Camilo Ángeles (2018). Cara has performed across southern Africa, in the United Kingdom, the USA and Switzerland with the likes of Shabaka Hutchings, Sarathy Korwar, Dan Leavers, Galina Juritz, Beat Keller, Matchume Zango, Jason Singh and Juliana Venter.

Jonothan Sweetman is one of the most original and sensitive drummers on South Africa's exploding music scene. His sound and approach attract attention wherever he plays and in whatever context he finds himself. Drumming is in his blood. His father, the late Robert Sweetman, was a great drummer who played professionally in the 60's and 70's. He was reluctant the first time Jonno asked him for a lesson, given the paternal association of drums with sex, drugs and rock and roll. Graciously putting aside his scepticism he gave the 13-year-old Jonno that lesson – and it all began. Jonno is currently a member of the Kyle Shepherd trio, Reza Khota Quartet and Buddy Wells quartet as well as the Lee Thomson Quintet. He performed at the 2008 through 2014 Cape Town International Jazz Festivals, the Standard Bank Youth Jazz Festival (Grahamstown) and Joy of Jazz (Johannesburg) and toured Europe with Jonathan Crossley in 2009, 2010 and 2012. The Kyle Shepherd Trio (the iconoclastic Shepherd was Standard Bank youth jazz artist in 2014) recently toured Europe, China and Canada playing at world class festivals including the Montreal Jazz Festival and Tianjin International Jazz Festival.

Displaying a characteristic openness to all authentic musical forms, Jonno also performs with Dan Patlansky, Gerald Clark and Albert Frost – three of South Africa's best-established blues artists. He recorded with Clark on his 2016 release "The Golden Goose" and with Frost on "The Wake Up". Both albums were nominated for South African Music Awards.

**Meryl van Noie** is a 'technologist', sound designer, musician and composer. She is eager to experiment with ambiguous textures, sound organisation, musical textures, visuals, animations, 'foraged sounds', as well as improvisational structures. She has both classical and jazz formal music training, having completed both a BMus (1997) and MMus (2005) degrees at the University of Cape Town. She is currently exploring an array of compositional tools and interdisciplinary, or collaborative work processes, whilst experimenting with hard and software.

**Miles Warrington** is a composer of electroacoustic music and an academic, having studied composition and music technology with Jürgen Braüninger. He furthered his studies at UCT under Theo Herbst and Martin Watt, completing his doctorate there in 2016. His main interest areas occupy the fields of electroacoustic art-music composition, research and performance. He is passionate about technology that explores the interface between humans and computers in the music domain and he investigates inter and cross-disciplinary modes of creativity between the arts and human sciences. He has a keen interest in analysis theory of compositional practice in

electroacoustic music and is inspired by the fields of cognitive and neuro-musicology, particularly where they intersect with composition. He was recently appointed as lecturer in Music Technology at the University of Pretoria, where he has been tasked to develop the programme there, and he serves as composition editor for the Journal of the Musical Arts in Africa.