

Friday, August 19

5 PM | Cube DIGGING IN THE CRATES The Sankofa Tape (live/fixed)

7 PM | Cube THE OTHER WAKANDA (fixed) Stephen James Taylor

Saturday, August 20

3 PM | Perform Studio SOUNDS IN FOCUS I

Dexter van der Schyff: Waterfall (fixed) Roxanne Turotte: Bestiaire (fixed) Ryne Siesky: ...grind... (fixed) João Pedro Oliveira: N'vi'ah (fixed) Simon Le Boggit: 48 Steps (fixed)

7 PM | Cube SOUNDS CUBED I

Jupiter Blue: A New World, Helium Diamons, and Kwa Song (live)

Sea Novaa: Rest as Resistance:
The Invitation (live)

Yvette Janine Jackson: Aboard the
Alliance (fixed)

Moksha Black (King Britt featuring
Roba El-Essawy): As It Should Be (fixed)

Sunday, August 21

1 PM | Perform Studio

KEYNOTE: You Haven't Met the Captain of the Spaceship...Yet Thomas Stanley

3 PM | Perform Studio SOUNDS IN FOCUS II

Barry Truax: The Shaman Ascending (fixed) John Young: Abwesenheit (fixed) Lidia Zielinska: Backstage Pass (fixed)

7 PM | Cube

Chris Coleman: Śūnyatā (emptiness) (fixed)
Philippe-Aubert Gauthier: Exploded Views:
Sound Machines, a Cubic Perspective (fixed)
Orestis Karamanlis: Toys (fixed)
Christophe Lengelé: Parmegiani Meets
SuperCollider 1 (fixed)
Nikos Stavropoulos: Karst Grotto (fixed)
James Bagshaw: Helicopter Synths (fixed)

9 PM | Cube

LISTENING LOUNGE

Spatialization of Sun Ra's Space Is the Place

Cube Fest Organizing Committee

Sarah M. Johnson Margaret Lawrence Eric Lyon Dylan Parker Tyechia Thompson Tanner Upthegrove

Cube Fest Technical Team

Gustavo Araoz Brandon Hale Tanner Upthegrove

Cube Fest Music Selection Committee

Anthony Kwame Harrison
Margaret Lawrence
Eric Lyon
Balbir Singh
Tyechia Thompson
Tanner Upthegrove

Artistic Directors' Welcome Statement

What you're witnessing is three years in the making, representing multiple collaborations and conversations about Afrofuturism and its connection to spatial music. This project started in the Cube, when we first met at the installation *Sound of Space*, created by Tyechia Thompson's class, Afrofuturism to Vibranium and Beyond. Experiencing Afrofuturist music in the immersive environment of the Cube suggested to us that much more was possible. This led to highlighting Afrofuturist music at Cube Fest 2022.

Our artistic vision is to make all sounds possible in cutting-edge audio research spaces that welcome every kind of music. For Cube Fest, that premiere space is the Cube, a unique performance environment that contains 140 loudspeakers and is effectively a new kind of musical instrument. We are so excited to share with you the incredible range of artistic expressions that the Cube Fest artists have realized in Perform Studio and the Cube.

Cube Fest is the result of many deep collaborations between the artists; Virginia Tech's spatial audio engineers at the Moss Arts Center and the research-focused Institute for Creativity, Arts, and Technology (ICAT); and the two of us: one a specialist in digital humanities and African American literature, the other a computer music composer with a focus in spatial audio. And finally our collaboration with the Cube Fest audiences. We want to hear what you think about this music! Post your thoughts using #CubeFest2022.

We are grateful for support from Cycling '74, the Cube Fest music review committee, the Center for Humanities, Digging in the Crates (VTDITC), ICAT, and the Moss Arts Center. Finally, we thank you, the audience, for joining us at Cube Fest.

Tyechia Thompson and Eric Lyon Artistic Directors | Cube Fest 2022

Friday, August 19

Digging in the Crates: The Sankofa Tape -- (fixed)

5 PM | Cube

\$10; free for current Virginia Tech Students

The Sankofa Tape represents generations of Black experiences of Virginia Tech community members past, present, and future. Stories, soon-to-be folktales, are shared on recordings crafted with spatialization in mind. The Digging in the Crates community at Virginia Tech (VTDITC) has created a sensational experience that includes a spectrum of frequencies and movements, which engage with "boom bap beats stored on hard drives" and "computer-programmed spatial orchestration," Afrofuturism themes, and Black history testimonies. The creation of *The Sankofa Tape* provides a one-of-a-kind multi-dimensional representation of previously documented Black experiences, as well as a blueprint for future realities.

Stephen James Taylor: Music from the Other Wakanda

7 PM | Cube

\$10; free for current Virginia Tech Students

An evening of transcendant tonality by Stephen James Taylor

PART ONE

1. African Sound Bath

Just intonation harmonies rise up into a swirling cleanse. Handclaps and singing provided by the San Bushwomen of Etosha, Namibia.

2. The Power of Twos

Written on Lou Harrison's "11-limit" just intoned steel guitar. Propelled forward in combinations of seven- and eight-beat couplets that immediately repeat.

3. Moving Boundaries

An 11-limit just intonation "shout out" based on lively rhythms derived from the geometric spacing of the 12-tone scale nested inside the 31-tone scale. It is counted out as 3+2+3+2+3+2+3+2+3+2+3+2+3=31, hence the time signature of 31/8. This rhythmic structure is infused with hip-hop shouts and custom-made instruments like the glass marimba, the Wilson Microzone, 31-tone vibes, Ubertar (electric guitar with movable frets), PVC horns, and a 31-tone gong array.

4. Dance of the Pebbles

A 31-tone equal temperament piece of spangled electronic staccatos in rhythmic unison with African drums.

5. Be Still

A custom tuning array of unusual ratios based on specific frequencies forcefully compressed into a narrow range. This produces a tense but stable foundation for an abstract rapper's exploration into mystic philosophy.

6. Melting Melody

Thirty-one-tone equal temperament melodic lines and harmonies slowly melt into each other. If Arvo Pärt's *Spiegel Am Spiegel* had been beamed to another planet, this piece (with its totally different DNA) is what that planet might have beamed back to us on Earth.

7. A Sound Named Zero

An M.L. Taylor poem accompanied by a "five-limit" ambient wash created using software programs written by Subhraag Singh and Marcus Hobbs.

10-MINUTE INTERMISSION

PART TWO

Classical Music from a Parallel Dimension

This piece depicts the sonic landscape of another world. It is an epic journey driven by the use of many different tuning systems. An eclectic blend of influences underlie this composition, from Xenakis to Ligeti to Baba Olantunji, Harry Partch, Frank Zappa, Terry Riley, and John Cage to Mozart to Dr. Dre.

Though consisting of 11 movements (the 12th movement being the silence at the end) it was conceived as a sort of 21st-century tone poem. From its narrative setup this piece plunges into a vast emotional terrain—at times frightening, at times tender.

Taylor's inquiry began in 2009 while writing the music for the *Black Panther* animated series. He began to ponder a number of questions such as, "If the African nation of Wakanda had indeed developed on its own as a high tech, highly literate society, independent of outside influences, then what if some sort of Indigenous classical music were to have evolved there? If so, what would it sound like?

"Would such music display the same harmonic intricacy found in western classical music while maintaining the complex primal rhythm elements that characterize all African music? Would they have unique instruments? What tuning systems would they use? And what if their ancient rhythms and microtonal tunings were designed to open doorways into other dimensions of consciousness where reality can be apprehended directly, beyond the logical capabilities of the mind?"

These questions led him off in an unusual direction different from the Wakanda of film, comic books, and TV animation. Taylor sees this combination of transcendent tonality with primal rhythms, surround sound, and classical music architecture as fertile ground for many more years of exploration.

Saturday, August 20

Sounds in Focus I 3 PM | Perform Studio Free

A concert of fixed international immersive music

Dexter van der Schyff

Waterfall (fixed)

This is a piece with a focus on water-based sounds and centers on hydrophone recordings taken on bodies of water on Mount Royal, Montreal. These are spread across the channels to create an immersive sonic environment. Additional sounds are created with synths and acoustic instruments (kalimba and hand drum) processed in convolution reverb with the hydrophone recordings as impulse responses. This sound palette is used to create a multi-layered, rich, and satisfying piece.

Roxanne Turotte

Bestiaire

This work is a tribute to living beings. Roxanne Turotte calls it "a story based on real life events and fabulous experiences: winged singers and imitators gifted with perfect pitch; a laughing dog that thinks he is a cat on a kayak; almost-human squirrels; thinking crows; a pet monarch saved in extremis and quietly having breakfast with my daughter, Fannie; the song of hungry coyotes; a 'smoocher' parrot conversing in Spanish, exactly at 880 Hz. There are also a few anecdotes about the escapade of a parakeet drawn to the windowsill by the smell of fried eggs on a cold winter night; our little pond being taken over by frogs; tracking my parakeet, Toupie, gone on an unexpected four-day, 12-kilometer free-range trip."

Ryne Siesky

...grind...

Each year approximately 500 billion plastic cups are used; of this number, roughly 6 billion cups end up in landfills. This work is a fixed media piece that utilizes a single sound: a one-second sound file of a plastic Keurig coffee pod hitting the floor. The sound is then morphed into more destructive sound forces, symbolic of the faulty business and political ideologies that ultimately contribute to a lack of environmental sustainability.

João Pedro Oliveira

N'vi'ah

N'vi'ah is an Old Testament word meaning "prophetess." A prophetess conveys one or more divine messages, often in the form of inspired songs. Many times her words are cryptic, requiring interpretation or even translation. This work by João Pedro Oliveira uses isolated phonemes as musical material. Intelligible words are not articulated, leaving to the listener the imagination of what their contents and meanings could be. N'vi'ah was commissioned by the Ibermúsicas Project and composed at the Human Interaction Laboratory–Diego Portales University in Santiago de Chile. It is dedicated to Federico Schumacher.

Simon Le Boggit

48 Steps

This work is an algorithmically-composed piece of music generated from chaos, repetition, and mutation.

Sounds Cubed I

7 PM | Cube

\$10; free for current Virginia Tech Students

Jupiter Blue: A New New World, Helium Diamonds, and Kwa Song

A New New World contends that it is time to replace the old new worlds—the last new world. It contends that any new reality begins with an internal synaptic spark—a dream of reality; that dream becomes a design; that design becomes self-actualized and propagated. Then you must decide, how much is realizing this new (better) environment of relationship and politics—this new, new world—worth waging battle for.

Helium Diamonds is about the environment and process of pressure—literal and figurative. The dichotomy of how the lightest element can become one of the hardest is a recipe that includes the fundamental ingredients of helium

and pressure. Immortal and immutable throughout all facets of existence, pressure can crush objects both material and spiritual, but that process/environment can also be the catalyst in the creation of phenomenally hardened jewels—transformation through strength training or recombinant creation through destruction.

Kwa Song is a vocal call to the universe—a sound-spell awakening the spiritual, material, and ancestrally discarded peoples. The imperative of survival is thought manifested through the creative power of words—words acknowledging the past and speaking new life for the future—allowing the spoken power to manifest into the material world as a guide and tool for evolution.

Sea Novaa

Rest as Resistance: The Invitation (live)

For Sea Novaa, Afrofuturism is a delicate balance of hearkening to the past, being rooted in the present, and imagining a future of Black life beyond its current state of global oppression. What would Black life be like if there were no oppression or subjugation—if there never was transcontinental slavery or colonialism? "I think Black life would be serene, joyous, leisurely, and full of rest. Thus, Rest as Resistance: The Invitation invites people of the African diaspora to rest. We don't have to wait—we can manifest our Afrofuturism now."

Yvette Janine Jackson

Aboard the Alliance (fixed)

This work is part of a series of compositions inspired by *Babel-17*, Samuel R. Delany's science fiction novel exploring theories of linguistic relativity—the relationship between language and cognitive behavior—and agency over one's own body. It is a site-specific episode composed for the Cube and follows the April 2020 debut of the series *Babel-17* (The Overture) by Jackson's electronics and chamber music ensemble, Radio Opera Workshop.

Moksha Black (King Britt featuring Roba El-Essawy)

As It Should Be (fixed)

King Britt writes, "'Moksha Black' refers to Black liberation through self realization and spiritual awareness. A sonic journey of shoegaze electronics." This release marks the return of Attica Blues singer Roba El-Essawy. "The song was written the moment I heard it," said El-Essaway. "It felt like rays of light, streaming beams; wanting to bathe and bask in it. Moksha Black is transformative." The sounds are embedded in the dark history of America but the voice lifts up into the galaxy.

Sunday, August 21

Keynote: You Haven't Met the Captain of the Spaceship...Yet

Thomas Stanley
1 PM | Perform Studio
Free

Sun Ra was a wildly inventive jazz composer, foundational figure of Afrofuturism, electronic music experimenter, keyboardist, bandleader, founder of the Sun Ra Arkestra, orator, philosopher, mystic, gnostic, poet, prankster, and so much more. Sun Ra continues to provide inspiration to countless modern musicians and remains a culturally relevant figure who in recent years has been cited on *Lovecraft County* along with countless books and articles in popular and academic press.

Despite his large cultural presence, Sun Ra the person is not well known or understood. As Sun Ra once said, "history is 'his' story. My story is mystery." In this keynote lecture writer, audio activist, professor at George Mason University's School of Art, and Sun Ra scholar Thomas Stanley takes us deeply into Sun Ra's thought processes in preparation for the Cube Fest immersive experience of Sun Ra's album, Space Is the Place. Stanley is the author of the book The Execution of Sun Ra: The Mysterious Tale of a Dark Body Sent to Earth to Usher in an Unprecedented Era of Cosmic Regeneration and Happiness (Volume II).

Sounds in Focus II 3 PM | Perform Studio Free

A concert of fixed international immersive music

Sunday, August 21, continued

Barry Truax

The Shaman Ascending

This work is inspired by and is a tribute to the practice and rich dynamic sounds of throat singing by the Inuit people in northern Canada. However, in this case, the source material is not a recording of throat singing, but that of a bass singer trained in both traditional classical and experimental music, including multiphonic singing. The "futuristic" aspect of the work is that multi-channel digital technology is used, first of all, to granularize the source material into short chant-like fragments; secondly to spin them around the audience in streams of one of up to 16 sequences, at both humanly plausible tempi (and then beyond that range); and thirdly, to use digital convolution techniques to bring out the inner harmonics of the same bass voice. The work is also inspired by a pair of Inuit sculptures by John Terriak of Nain, Labrador, depicting a traditional shaman, images of which ascend a Caribou antler and become increasingly brilliant, suggesting a transcendent state of ecstasy. A similar progression occurs at various points in the work when the vocal harmonics emerge out of the pulsating texture of the granular vocal material. As a result, the work is based in traditional Indigenous practice, extended through contemporary digital technology.

John Young

Abwesenheit

This work derives from a short audio recording made in the garden of the Beethoven Wohnung Heiligenstadt, where Beethoven spent the latter half of 1802 seeking respite for his failing hearing. Although not as quiet a spot as it was 216 years ago, the place's historical resonance of sounds and artifacts—distant chimes, a death mask, creaky floors—imparts a profound feeling of absence. The work aims to project that sentiment, realized as an "acousmatic space" through amplification of spatial envelopment, growth and transformation of sonic energy, and submission into silence. The title is borrowed from the second movement of Beethoven's Piano Sonata op. 81a.

Lidia Zielinska

Backstage Pass

In this work, the piano keyboard becomes the interface between the inside of the instrument and the accumulated experience of the listener's life. The acoustic world inside the piano looks different than what we experience at a concert: it resembles the experience of a child sitting under the piano. The acoustic world outside the instrument is not only its real sound at concert (i.e. in specific acoustic spaces of different reverberation), but also—or perhaps, above all—its sound in our long-term memory, in the tradition of piano literature, in various cultural codes and emotional reactions remembered.

The composition deals with sounds generated inside the instrument: sounds of the instrument's mechanics, as well as specific reverberation inside the sound box. Symbolically, it also refers to what the instrument has experienced under numerous pianists' fingers. The inside of the piano gets resized to the volume of a large concert hall, with all acoustic properties of the piano's interior being preserved and intensified. Listeners experience resized timbres, as if they found themselves inside the instrument. Due to the scale shift, the aesthetic experience is accompanied by a more distinct physiological experience (increased changes of acoustic pressure). One also hears idioms of great historical piano literature reverberate.

Sounds Cubed II (fixed) 7 PM | Cube \$10; free for current Virginia Tech Students

Chris Coleman

śūnyatā (emptiness)

This work is the middle piece in Coleman's triptych, Caves of Dunhuang, which is scored for a unique mixture of Chinese and Western instruments, paired in families: two strings—erhu and cello, two winds—xiao and bass clarinet, and two struck or plucked instruments—yang qin and harpsichord, with temple bells and fixed media. The triptych consists of madhyamāpratipad (the middle way), śūnyatā (emptiness), and vijñāna-santāna (rebirth). Each is inspired by Buddhist beliefs depicted in the thousand-year-old meditation niches carved into the cliffs of Dunhuang, China. The first piece is scored for instruments alone, the second for fixed media based on transformations of a recording of the first movement, and the third piece combines instruments with fixed media in new transformations. śūnyatā is the concept of 'not self,' of awareness in which perception and feeling cease, of meditating to the loss of self-awareness. The piece transforms a recording of the first movement through massive replication and phase-shifting, obliterating the sense of the original piece in a musical śūnyatā.

Philippe-Aubert Gauthier

Exploded Views: Sound Machines, a Cubic Perspective

This work offers a spatialized inner listening of the heart of hardware modular synthesis. As a systematic approach to spatial audio, 134 output points of a modular synthesizer have been independently recorded to become a short piece without any further editing, where space and channel density replace duration and time architecture. Captured and cataloged systematically from left to right and top to bottom, this spatial sound capture explores a simple concept: If we still often rely on mixing and signal processing for sound space composition, why not explore the spatial inner architecture of modular synthesis, which offers plethoras of signal variations through more than hundreds of signal points in such sound machines. For time coherence and variations, every part and module of the modular synthesizer were controlled by eight composed control voltages for a three-part miniature piece that unfolds as a dense catalog of waveforms, processings, and timbres. *Exploded Views* was inspired by the potential of the 134-channel Cube at Virginia Tech. The piece is specifically created for the Cube's high-density system.

Orestis Karamanlis

Toys

In this work, most of the sounds originate from toys' recordings and any treatment has been accomplished by means of a programming language called SuperCollider. "I have tried to come up with a piece that would rely more on an internal pulse than on the transformation of sonic material," says Karamanlis. "I somewhat got tired with the kind of pre-recorded music which is characterized by the desire to explore timbre and space above all, often at the expense of other qualities. Toys was constructed by making use of rhythmic patterns. Starting from large collections of sound files, I work within a programming language in order to describe a higher-level representation of musical structure and then become a listener to the result. In a way I am more interested in the aggregate sonic outcome than in isolated musical gestures."

Christophe Lengelé

Parmegiani Meets SuperCollider 1

This work is based on a custom tool, called Live 4 Life, which Lengelé has been developing in SuperCollider since 2011. This program transposes some life processes in music composition by confronting pre-recorded parameter sequences with all kinds of real-time variations. It seeks to ease spatial sound creation over numerous recordings of sound memories by controlling the uncontrollable through several interfaces, using fixed or more or less random algorithms (e.g. playback speeds, buffers, or durations). The objective is also to investigate the spatiotemporal relationships between sound objects and the impact of a multi-channel effect environment on their development.

The form of the performance tends to look like life experiences, which can oscillate slowly or suddenly between sweetness and violence, intense moments and periods of boredom and sadness. The journey alternates between light or heavy sequences around the four elements (earth, water, air, and earth), dark fragments of voices, and spatialized textures and polyrhythms. The primary sonic source consists of more than 1,700 sound samples taken from Bernard Parmegiani records, *De Natura Sonorum*, *Rêveries*, and *Dante's Hell*. The enveloping sound vortexes are launched around the audience and their playback speeds are frenetically modified, thus accelerating or slowing down the lives of large amounts of sound objects. "What I call the machine breath can sometimes be felt by overloading the CPU, which prevents triggering new events: the story of Free Hardcore Electroacoustic Parties begins," says Lengelé.

Nikos Stavropoulos

Karst Grotto

The title of Nikos Stavropoulos's composition, *Karst Grotto*—chosen for its onomatopoeic qualities and its direct references to landscape types, as well as geological spatial structures and processes—reflects the sound world of the work. Karst, a particular topography, is created by the dissolution of soluble rock types from their contact with acidic rain water. A micro level chemical process characterizes the morphology of entire landscapes and results in complex networks of small-scale, micro-space, features and textures like fissures and rillenkarrens. *Karst Grotto* was realized at the studios of the Department of Music Technology and Acoustics Engineering of the Technological Educational Institute of Crete (Greece) and the Institute for Computer Music and Sound Technology (ICST) of the Zürcher Hochschule der Künste (ZHdK) in Zurich, Switzerland, between July 2016 and January 2017. The work is an artistic interpretation of the notion of aural micro-space and an attempt to work with the reality of such a notion by using specially developed hardware.

Sunday, August 21, continued

James Bagshaw

Helicopter Synths

This work utilizes ambisonic synthesizers as part of a research residency at the University of Huddersfield in 2018. All sounds in the piece are created by these virtual synthesizers (except a kick drum and hi-hat sample). In an attempt to generate height, sound-objects have been created with the effect of overhead flight, resolving to a conventional driving heavy riff, akin to the stylistic aesthetics of dance music.

Listening Lounge

Spatialization of Sun Ra's Space Is the Place 9 PM | Cube

\$10; free for current Virginia Tech Students

The album Space Is the Place, released in 1973, holds a central position in Sun Ra's vast body of work, aligning with Sun Ra's personal mythology as a visitor from Saturn, here to help the people of Earth rediscover our innocence and leap forward into a better future. The five tracks of this magnificent, uncategorizable album offer staggering musical complexity and variety throughout. The album opens with the epic, celebratory Space Is the Place; followed by the more traditionally jazz inflected, piano-driven Images (In a Mirror); then the pensive Discipline 33 unfurls a long, majestic melody and gradually opens up to places unknown; followed by the wild, fun, unpredictable Sea of Sounds. The album achieves escape velocity with the infectious, groove-laden joyride that is Rocket Number Nine.

Sun Ra was a one-of-a-kind artist, and *Space Is the Place* could only have been created by Sun Ra and his Arkestra, with its unique mix of virtuosity, discipline, experimentation, and playfulness. Mastery of various jazz idioms is demonstrated throughout, but Sun Ra's visionary intensity could never be contained within a single musical genre, even one as rich as jazz. In *Space Is the Place*, Sun Ra constantly challenges us with the unexpected, and when we go on the journey that he mapped out, his music rewards us with liberation and happiness.

Want Even More?

Read all artist biographies at icat.vt.edu/cubefest.





