

University of North Texas College of Music

Faculty Recital | Monday, October 2, 2023 | 8:00 pm | MEIT (M1001)

Jon Christopher Nelson, composer

The Persistence of Time and

- Memory (2023)Jon Christopher Nelson (b. 1960) I. And Time Unfolds Like a Flower (8:35)
 - II. Tightly Wound (7:35)
 - III. Toward the Event Horizon (9:01)
- IV. Ripples in the Fabric of Space-Time (7:50)
- V. Bang, Crunch, Bounce (9:00)
- VI. The Entropy of Memory (11:25)

world premiere

Ninetieth program of the 2023–2024 season Photography and videography are prohibited

Program Notes

The Persistence of Time and Memory (2021–2023) is an acousmatic composition in six movements that is inspired both by Salvador Dali's painting *The Persistence of Memory* and contemporary theories of time, perception, and cognition. The work juxtaposes a variety of sound worlds to create surreal sonic relationships, encouraging one to hear commonalities among divergent sounds. In addition, recorded sound samples are frequently manipulated and obfuscated throughout the composition to create sounds that may seem familiar but cannot quite be identified, thus inviting the listener to perceive connections with sounds they may remember from their past. Since sounds in our aural memories carry different significance and meaning for each individual, the composition provides potential for a diverse and rich unfolding of aural understanding unique to each listener. While conceived as a six-movement cycle, each movement of *The Persistence of Time and Memory* may also stand alone as an individual composition.

And Time Unfolds Like a Flower explores timbrel relationships of seemingly disparate materials as they co-mingle, evolve, and transform. Recorded industrial and metallic sounds fuse and diverge with synthetic sounds, creating transformations and suggesting correlations that invite listeners to hear the musical potential of the noisy sound world around us. Inspired by contemporary theories of time in quantum physics, this work explores the notion of multiverses. In particular, this movement speculates about how music might sound as it follows many different possible trajectories through time.

Tightly Wound utilizes string sounds as well as samples of plucked objects to create a surreal sonic landscape bursting with nervous energy. The strings, both real and synthetic, are rubbed, plucked, bowed, scraped, distorted, and excited via other means. Similarly, strings are used to provide resonance or to filter other sounds in this composition. Could it be possible that everything in the universe really does consist of strings instead of particles?

Toward the Event Horizon conceptualizes what might transpire as sound waves approach the event horizon of a black hole, where time slows down and a sound's very existence becomes stretched beyond recognition. In this work spectral elements of sounds are temporally and registrally manipulated, disintegrated, and reconstituted. The resulting soundscape attempts to create a sense of slow and massive sounds that are wrenched apart. While arguably there is no sound in the vacuum of space, NASA scientists have noted that the black hole at the center of the Perseus galaxy releases pressure waves that cause subsonic ripples in the cluster's hot gas. While nearing the completion of this movement, NASA released an audio sonification of these black hole pressure waves. NASA's sonification is included in the final moments of this composition.

Ripples in the Fabric of Space-Time imagines a sound world filled with the "chirps" that result from two black holes colliding. As black holes collapse into one another they create a highly deformed new black hole that emits gravitational waves from its equator. These gravitational waves move up and down in frequency a few times before they die, creating "chirps." In this movement aural chirps disrupt our temporal expectations, resulting in an animated soundscape filled with rapid and playful transformations between allusions to acoustic instruments, sonic environments, and percussive noises.

Bang, Crunch, Bounce is inspired by Loop Quantum Gravity, a theory that strives to create a grand unifying theory that merges quantum mechanics and general relativity. This theory speculates that our known universe is in an infinite cycle consisting of a Big Bang, a subsequent expansion followed by a contraction, or "crunch," until everything compresses into another Big Bang, from which another universe "bounces" into existence. This work contains numerous bang/crunch/bounce cycles that create a very small set of sonic universes. Within each of these cycles, an acoustic sound world emerges and regresses. Each cycle is exponentially shorter than the previous soundscape, much like the duration of bounces of a ping pong ball become shorter and shorter. Within this movement each sonic environment was selected from among recordings of acoustic environments collected over three decades.

The Entropy of Memory reflects on notions of the universe's natural tendency to move from order to chaos, a primary factor that physicists theorize encourages us to experience the "arrow of time" as constantly moving forward. While time moves forward, one anticipates the future, experiences the now, and lodges experiences in memory. However, as time passes, memories of the more distant past often lose the vivid clarity that they initially held, sometimes dissolving into vague recollections or becoming completely lost. This last movement of *The Persistence of Time and Memory* presents a thick fog of sound that is awash with fleeting memories from the distant past. In particular, these sonic remembrances consist of brief excerpts from key moments from other musical compositions that are stretched and manipulated spectrally. These aural reflections are combined with synthetic tones that gradually dissolve from pitched notes into noise.

Special thanks to the University of North Texas for providing the Faculty Development Leave, Initiative for Advancement in the Arts Fellowship, and Scholarly and Creative Activity Award that made this composition possible. Bang, Crunch, Bounce was made possible through a composition residency at the Visby International Centre for Composers on the island of Gotland, Sweden. Permission to use nebulae images and the black hole sonification heard at the end of Toward the Event Horizon was graciously provided by NASA.

about the composer

Jon Christopher Nelson (b. 1960) is best known for his work in computer and electronic music. His electroacoustic compositions have been performed widely at festivals and conferences throughout the United States, Europe, Asia, and Latin America. He has been honored with numerous awards including fellowships from the Guggenheim Foundation, National Endowment for the Arts, and Fulbright Commission. He is the recipient of the Luigi Russolo Prize (1995), Bourges Prizes (1996, 1997, 1999, 2002), Bourges Euphonies d'Or Prize (2004), and International Computer Music Association's Americas Regional Award (2012) and Music Award (2020). In addition to his electroacoustic works, Nelson has composed a variety of acoustic compositions that have been performed by ensembles such as the Lydian Quartet, New World Symphony, Memphis Symphony, Brazos Valley Symphony Orchestra, ALEA III, and others. He has composed in residence at Sweden's national Electronic Music Studios, the Visby International Composers Center, and IMEB in Bourges, France.

