

Matched Pairs is a set of improvised pieces based on simple musical systems consisting of computer programs activated and controlled by two live performers. In each of the four pieces, the performers play into microphones and the programs track their pitch and amplitude data to manipulate computer-generated sound. Each piece was designed around sets of conditions that are as simple as possible. My goal was to create an improvisational dynamic that emerges from these simple materials so that all types of interactions in each piece – within the electronics, between the players, and between the players and electronics – are constantly in interdependent flux.

The title refers both to the way that pairs of microphones are sold as well as to a type of experimental design. The form of the piece relates to my preoccupation with symmetry and the exhaustion of possibilities within defined parameters: there are two performers, two speakers, two modes of playing (short and long).

The Hal Saflieni Hypogeum is a unique subterranean Maltese Neolithic sanctuary with a well-documented history of interest in its acoustics.

Acoustic research by the composer into the sonic properties of this space suggests acoustic or spectral properties may have played a motivational or cultural role for the site's Neolithic creators. This work identifies one of the earliest known examples of a manmade structure with a significant musical element to its interior architecture.

Underground places the sounds of live instruments into this space; the electronics move the listener to different locations within the ancient site, and the performers play to resonate the space.



EASTMAN
SCHOOL OF MUSIC
UNIVERSITY of ROCHESTER



eastman
audio research studio

Thursday, March 2, 2023
Hatch Hall
7:30 PM

~ PROGRAM ~
EARS

Matthew Barber, *interim director*
assisted by Logan Barrett, Cory Brodack, Parker Callister, Tucker
Johnson, and Ko Muramatsu

viv (2005)

Junghae Lee
(1964)
14'

Uday Singh, *baritone saxophone*
Reilly Spitzfaden, *keyboard/electronics*

Temporary Residing (2017, rev. 2021)

Fulya Uçanok
8'

Matched Pairs (2023)

- I. Long/Long
- II. Long/Short
- III. Short/Long
- IV. Short/Short

Logan Barrett
(1997)
10'

Eric Bergeman, *flute*
Daniel Hirshbein, *oboe*

Collage of Oblivion (2021)

Yi-Ning Lo
(1995)
5'30"

Underground (2019)

Kristina Wolfe
10'

Eric Bergeman, *bass flute*
Daniel Hirshbein, *oboe*
Holden Turner, *tenor*
Artur Korotin, *violin*
Ko Muramatsu, *piano*
Parker Callister, *bass drum*

The title **viv** expresses vitality, liveliness and dynamism. Both the saxophone and the electronics are sources of vitality. The electronics augment the saxophone sound in many respects, particularly in terms of rhythm and harmony, and increasingly develop a life of their own.

The central idea is augmentation or “multiplication”: using a variety of multiplicative processes small sound particles are given a varied and variable sound shape. At the outset the acoustic instrument has the dominant role: the live saxophone is the only sound source to begin with. The delay technique used here is controlled by the saxophonist. The electronics performer then starts to play saxophone samples, gradually disassociating himself from his source and becoming an independent voice. In the middle section, the saxophone and the electronics gradually move onto an equal footing, a duo playing the same sound material. The “real” multiphonics played by the saxophonist and the “virtual” multiphonics produced by the electronics performer (using ring modulation) intermingle and migrate through space, generating a real and a virtual reality that coexist harmonically. Another important aspect of this piece is the spatialisation of sounds in space. The sounds’ spatial distribution is achieved through a combination of isolation and motion. Their spatial motion supports, among other things, the contrast between direct and indirect sound, and also the modulation between solo-like and ensemble-like sound. The spatial motion in this piece was designed for eight channels.

Temporary Residing moves through various “moments”. These movements are sometimes enacted through sudden ruptures and at others, subtle leakages and transitions. The listener goes through various “residences” staying temporarily at each one, exploring multiple spaces, behaviors of sound and listening situations. It is messy, it is plural, it is always situated.
