Mathematics Made Music

nine imaginary journeys in time, sound, and vision

a musical event in the
2005 **Art + Math = X** Conference
University of Colorado, Boulder

Saturday, June 4, 2005

4:00 pm

Boulder Public Library

concert curator: Andrew May
conference director: Carla Farsi

PROGRAM

1. Canon (6:34)
David Kim-Boyle

Canon was written for piano with real-time audio and video processing, using Miller Puckette and David Zicarelli's Max/MSP software, supplemented by Cycling '74's Jitter tools for video processing. Pianist and computer play an increasingly complicated, dense, and heavily processed canon together. Visual canons transform the image of the pianist's moving hand. In this concert, the sound and the computer's display from a live performance are used to create a "disembodied" performance on DVD. (D. K.-B./A.M.)

2. Dreams in the Desert (10:47)
Elainie Lillios

Dreams in the Desert calls to mind reveries of a person on a desert caravan. Scenes play through the dreamer's mind; perhaps they are memories past or maybe longings for another time and place. The work was composed in the electroacoustic studios of Bowling Green State University and the composer's home studio. (E.L.)

3. Sivel (3:40)
Michael Theodore

Michael Theodore , on the faculty at the University of Colorado Boulder, created *Sivel* by using the computer to vary and transform a small amount of sonic and visual source material. Hints of these sources emerge through the work, but the shape and character of the computer processing over time are at the heart of the experience. (M.T./A.M.)

4. Tear (9:17)
Shahrokh Yadegari

Tear is based on an improvisation on a poem by the 13th century Persian poet Hafez, sung by the Iranian master vocalist Mohammad Reza Shajarian, using the mode of Bayat-e Tork (similar to the western major scale with the 7th degree flatted a quarter tone). The computer sounds were generated using the Recursive Granular Synthesis method devised by Yadegari. (S.Y./A.M.)

5. Amazilia (2:15)
Brian Evans

A digital excursion of sound, mapped to number (its raw digital state…no pun intended), visualized (a digital paint-by-number) and re-sonified (a Pythagorean feast, pun intended, as it's all number anyway once you go digital). A process unfolds as image and sound. Hear the colors. Listen with your eyes. (B.E.)

6. Taedet animam meam (5:25)
Colby Leider

The living sound of singing is spectrally altered by the computer in *Taedet animam meam*, creating two sharply contrasting worlds: the human and the electronic. The two engage in a brief dialogue and eventually agree to disagree. The work was realized using James McCartney's SuperCollider synthesis environment. (C.L./A.M.)

7. Metadisco 2 / Are You Gone? (4:33)
Kristy McGarity (sound music) and Michel Scott (visual music)

The original *Metadisco* put clichéd percussion and analog synthesizer sounds from early-nineties techno dance music into a new context. Ten years later, McGarity revisited the idea with this sequel. The video is composed entirely out of film leader, paint, and ink. (K.McG./A.M.)

8. Joyce's Vision (4:06)
Robert Mackay

This piece is based on the opening of chapter 11 of James Joyce's Ulysses, which has a particularly musical quality—no surprise, as Joyce meant it to be an overture to the rest of the chapter, which is a tribute to the art of music! The material is created solely from transformations and combinations of Joyce's text, read by Mackay. The sonic material mirrors the literal meaning of the words, and creates a psychological interpretation of the text. (R.M./A.M.)

9. Moving Target (9:22)
Pursuit; Reflect; Release
Dennis Miller

Moving Target is a series of three short works that explore various textures and objects, and different approaches to the relationship between the musical and the visual. All images were created using the POVray scene description language. Musical sources include Symbolic Sound's Kyma system and the Kurzweil 2600 sampler. (D.M./A.M.)