STANFORD PAN-ASIAN MUSIC FESTIVAL

2008

APRIL 20 - MAY 4

JINDONG CAI, Artistic Director

China on Stage

中國大舞台

PACIFIC RIM OF WIRE

STANFORD LAPTOP ORCHESTRA AND STANFORD NEW ENSEMBLE IN A NETWORKED PERFORMANCE WITH BEIJING

GE WANG AND JINDONG CAI, DIRECTORS

DINKELSPIEL AUDITORIUM

TUESDAY, APRIL 29, 8 P.M.

(WEDNESDAY, APRIL 30, 11:00 A.M., BEIJING TIME)

PROGRAM

I

One Who Moves Without Direction — **Jingjing Lou**
(World Premiere)

Drone — **Dan Trueman**

CliX — **Ge Wang**

Take it for Granite — **Perry R. Cook**

TBA — **Ge Wang**

Crystalis — **Ge Wang**

INTERMISSION

II

In C — **Terry Riley**

Improvisation Telematica

Chris Chafe, Hongmei Yu, Bruce Gremo

Tuning Meditations — **Pauline Oliveros**

ABOUT THE MUSIC

Jingjing Lou: *One Who Moves Without Direction*
A multi-media piece written for solo flute (double piccolo), 2 violin, 1 violoncello, 2 percussion, laptop orchestra, lighting, acting, conductors, and Chinese calligrapher.

Dan Trueman: *Drone*
This is part of a series of works and experiments with onboard sensors (found on newer Apple and other laptops, intended to protect the hard drives in the event of sudden motion) to control sonic and musical parameters. The players have control over volume, pitch, and timbre via the onboard accelerometers and trackpad.

Ge Wang: *CliX*
In this piece, human operators type to make sounds, while their machines synthesize, synchronize, and spatialize the audio. Every key on the computer keyboard (upper/lower-case letters, numbers, symbols) is mapped to a distinct pitch (using the key's ASCII representation) and when pressed, emits a clicking sound that is synchronized in time to a common pulse. A (human) conductor coordinates frequency range, texture, movement, and timing.

Perry R. Cook: *Take it for Granite*
This sonic landscape was mined from recordings of stone sculptor Jonathan Shor's working of a large piece of granite. The composer recorded Shor's drilling, placing shims, tapping the shims, and the wonderful sound of millions of years of energy being released as the stones split. The laptop orchestra players manipulate these sounds via a ChucK program that allows them to change proporties of the sounds. Eventually, a rhythmic pattern emerges (the striking) wherein the individual SLOrk players control both texture and synchronization.

Ge Wang: *TBA*
On-the-fly programming, or live coding, is the practice of writing code in real-time to create music. This piece is our first attempt at large scale, group live coding (15 humans/laptops) to create a single sound world. Players, divided into squadrons, follow instructions from a conducting live coder, who issues directives both in the form of code fragments (in the ChucK language) and sentence fragments (in the English language). In keeping with the crucial live coding tenet of revealing the process to the audience, the conducting machine will be projected 1) for all to observe, and 2) as a means of instructing the ensemble.

Players begin with a simple code template, which they modify over the course of the performance to create and sculpt sound. Operations include code modifications, adding code (+) to be rendered into sound, or replacing existing code (=) with updates. "Rally points" are set throughout the template to coordinate group coding bombardments. The piece alternates between detailed code changes and sections in which players are encouraged to improvise. In on-the-fly programming, the code is

the instrument; and it is played via the act of programming. Also, we never really know what's going to happen next (expect glorious disasters). Until it's performed, the piece remains "TBA" to all, including us...

Ge Wang: *Crystalis*
Originally created for the Ear to the Earth Festival in NYC, this piece is a sonic rumination of crystal caves in the clouds, where the only sounds are those of the wind and the resonances of the crystals. It uses two simple instruments called the crystalis and wind-o-lin. These instruments make use of the laptop keyboard (which controls pitch and resonance) and the trackpad (which the players "bow" in various patterns to generate sound).

Terry Riley: *In C*
We present a special networked performance of Terry Riley's *In C*, for laptop orchestra, er-hu, wind controller, and celleto. *In C* can be played by any number of people, and consists of 53 short, numbered musical phrases; each phrase may be repeated an arbitrary number of times. Each musician has control over which phrase he or she plays: players are encouraged to play the phrases starting at different times, even if they are playing the same phrase (and in our case, the laptop players have interactive control over timbre and articulation of the phrase being played). The musical ensemble should try to stay within two to three phrases of each other. The phrases must be played in order, although some may be skipped. It is often customary for one musician (in this case a computer) to play the note C in repeated eighth or quarter notes. This drone functions as a metronome and is referred to as "The Pulse".

Chris Chafe, Hongmei Yu, Bruce Gremo: *Improvisation Telematica*
A tele-improvisation between Beijing and Stanford.

Pauline Oliveros: *Tuning Meditations*
(stay tuned for special instructions!)

ABOUT THE PRODUCTION

The Stanford Laptop Orchestra (SLOrk) is a large-scale, computer-mediated ensemble that explores cutting-edge technology in combination with conventional musical contexts — while radically transforming both. Founded in 2008 by director Ge Wang and students, faculty, and staff at Stanford University's Center for Computer Research in Music and Acoustics (CCRMA), this unique ensemble comprises more than 20 laptops, human performers, controllers, and custom multi-channel speaker arrays designed to provide each computer meta-instrument with its own identity and presence. The orchestra fuses a powerful sea of sound with the immediacy of human music-making, capturing the irreplaceable energy of a live ensemble performance as well as its sonic intimacy and grandeur. At the same time, it leverages the computer's precision, possibilities for new sounds, and potential for fantastical automation to provide a boundary-less sonic canvas on which to experiment with, create, and perform music.

Offstage, the ensemble serves as a one-of-a-kind environment and classroom that explores music, computer science, composition, and live performance in a naturally interdisciplinary way. — http://ccrma.stanford.edu/groups/slork/

STANFORD LAPTOP ORCHESTRA (SLORK)

Ge Wang: *Director*

Adnan Marquez-Borbon	Jason Riggs	Max Citron
Baek San Chang	Jeff Cooper	Michael Berger
Brett Ascarelli	Jeff Smith	Nick Bryan
Chris Warren	Jieun Oh	Patricia Martinez
Chryssie Nanou	Juan Cristobal Cerrillo	Reed Anderson
David Bao	Juhan Nam	Rob Hamilton
Diana Siwiak	Kayla Cornale	Steinunn Arnardottir
Ethan Hartman	Kyle Spratt	Turner Kirk
Ge Wang	Lawrence Fyfe	Vasiliy Sharikov-Bass
Gina Gu	Luke Dahl	
Hayden Bursk	Marisol Jimenez Becerra	

Featuring Special Guests

Stanford: Chris Chafe (*celleto*), Jingjing Lou, Stanford New Ensemble, conducted by Jindong Cai
Beijing: Hongmei Yu (*erhu*), Bruce Gremo (*wind controllers*)

Network Researchers and Engineers

Stanford: Juan-Pablo Caceres, Rob Hamilton, Deepak Iyer, Ge Wang, and Chris Chafe
China: Hao Ma, Ken Fields

Acknowledgments

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