

# Stanford Laptop Orchestra (SLOrk)

*presents*

## SLOrk Spring Concert 2010

June 2, 2010, Wednesday 8 p.m.  
Dinkelspiel Auditorium, Stanford University



***Electrode (2010)***

*Chris Chafe*

***The Mourning Light (2010)***

*Alan Sien Wei Hshieh, Isaac Wang, Aaron Zarraga*

***Intellectual Impropriety 0.6***

*Bruno Ruviano*

***Cop de Cap by Experimental Headbang Orchestra***

*Charlie Forkish, Uri Nieto, Adam Somers*

***#slork***

*Luke Dahl, Jorge Herrera, Carr Wilkerson, Visda Goudarzi and Stephen Hess*

***Mesetas (2010)***

*Marisol Jiménez*

***Spring is an Empty Mind***

*Jay Bhat, Nick Kruge, Daniel Smith*

***Spaetial***

*Lekan Wang*

***In.grain***

*Giancarlo Daniele, Ben Holtz, Linden Melvin*

***Converge***

*Jieun Oh and Ge Wang*

### **Ensemble**

Aaron Zarraga | Adam Somers | Alan Sien Wei Hshieh | Ben Holtz | Charlie Forkish  
Daniel Smith | Giancarlo Daniele | Isaac Wang | Jay Bhat | Jorge Herrera | Lekan Wang  
Linden Melvin | Nick Kruge | Stephen Hess | Uri Nieto | Visda Goudarzi

Ge Wang, **Director**

Robert Hamilton and Jieun Oh, **Co-directors**

# Program Notes

## ***Electrode (2010)***

*Chris Chafe*

Synthia Payne, voice  
Zach Herchen, saxophone  
Sean-David Cunningham, violin  
Chris Chafe, conductor

Electrode combines music from outside the hall and inside the brain. Soloists piped in from Colorado and New Jersey are performing with the laptop orchestra, which itself is making music derived from about 150" of brain activity. Brain recording data and the idea of "musifying" it are thanks to neurologist Dr. Josef Parvizi of the Stanford University School of Medicine. Microphones thanks to Chris Countryman of Countryman Associates, Inc. Support for network audio equipment, thanks to Stanford Institute for Creativity & the Arts.

## ***The Mourning Light (2010)***

*Alan Sien Wei Hshieh, Isaac Wang, Aaron Zarraga*

The Mourning Light occurred during the 6th and 9th hours when the darkness tried to overcome the light; the curtain was torn and the whole earth shook as the battle for love waged in the darkness. The piece represents the sorrow felt in the darkness before the morning Light arose once more.

## ***Intellectual Impropriety 0.6***

*Bruno Ruviano*

This piece contains hundreds of samples of existing music borrowed from other composers, including Galina Ustvolskaya and Beethoven. This work is part of my dissertation project for the doctorate in Music Composition, centered on the topic of sampling and musical borrowing.

## ***Cop de Cap by Experimental Headbang Orchestra***

*Charlie Forkish, Uri Nieto, Adam Somers*

Conducted by thrash music director Charlie Forkish, the Headbang Orchestra proudly presents the first concerto ever written to be played by headbangers. Performed by Experimental, an ensemble of 15 highly qualified bangers featuring noize soloists extraordinaire, Uri Nieto and Adam Somers, *Cop de Cap* is the Ultimate Metal Experiment Odyssey that will make your heads want to bang. The libretto is about a young man that couldn't find love until the day he found it.

## ***#slork***

*Luke Dahl, Jorge Herrera, Carr Wilkerson, Visda Goudarzi and Stephen Hess*

*#slork* is a piece that blurs the conventional line between audience and performer. With the help of the Twitter API, ChuckK and Processing, *#slork* builds a web of interconnected posts (or tweets) that are represented both graphically and sonically. Take out your phone and become part of the performance! Tweet your thoughts to *#slork* and play along with the orchestra.

## ***Mesetas (2010)***

*Marisol Jiménez*

*Mesetas* is the second of a series of pieces entitled "Cantos del Arenal" inspired by the concepts of multiplicity of Henri Bergson and the "rhizome" of Guilles Deleuze. This piece features an instrument that was designed specifically for this work, which I called Noise Harp. There are multiple sizes of this instrument that all together form a small distorted orchestra. The music is an extension of a larger work entitled *Portal Rizomático* that is a sound and visual installation, currently presented at the CCRMA entrance.

## ***Spring is an Empty Mind***

*Jay Bhat, Nick Kruge, Daniel Smith*

Our piece reflects the feeling of any CCRMA student as he or she finally stumbles (gracefully) into the end of the Spring Quarter. It was composed for our "Air Handbells" instrument, a multi-faceted program for The Audicle. The interaction features 3D controlled handbells that can be struck in mid-air, or, using an interpretation of Ge Wang's "Crystalis" instrument, bowed similarly to wineglasses. The performance is visually guided by a Guitar-Hero-Style score on screen, which can accept any MIDI file and parse out individual parts for the Air Handbells Orchestra. The position and timing of the score is controlled by a networked syncing program also running on ChuckK, but still, the score allows for a lot of interpretation from each member of the SLOrchestra in terms of timing, volume, and density in order to maintain expressiveness and originality.

## ***Spaetial***

*Lekan Wang*

An experiment in space, visualization, and movement, as well as sound, *Spaetial* takes advantage of the location of the speakers on stage to effectively create sounds that seem to emanate from a certain part of the stage, and move around spatially. Each performer is in control of not only the sound created, but also the location and movement of the sound, as well as parts of the visualization of the sound.

## ***In.grain***

*Giancarlo Daniele, Ben Holtz, Linden Melvin*

*In.grain* explores the world of audio sampling and granular synthesis. Throughout the performance, a series of audio samples will emerge from a sound texture created out of other audio samples. The samples only emerge long enough to be heard and are then absorbed back into the sea of granular texture. The technology constructed for the piece employs a wide range of sample-manipulating effects from rate alteration to playback speed manipulation. As the beginning and the conclusion of the piece suggest, *In.grain* attempts to reduce audio samples to their most elementary state and expose the fundamental equality of every sound we perceive as humans.

## ***Converge***

*Jieun Oh and Ge Wang*

Jieun and Ge recorded sounds, took pictures, and submitted text descriptions of their daily lives during the weeks preceding tonight's concert using "Convergence", an application for the iPhone written specifically for this piece. The sounds, pictures, and text descriptions have been timestamped with GPS information and stored in a database server, and they form the main ingredients for the piece, "Converge." During the piece, events recorded from the past are sonified and visualized, converging to the present time and place. iPads are used to control and trigger specific events on the visualizer as well as to spawn sound recordings and set filter parameters on the SLOrk stations.

## Guest Bios

**Bruno Ruviano**, composer and pianist from São Paulo, Brazil, was born in 1976, and has lived in 21 different places: Rua Theodureto Souto, Rua Cajati, Casa do Seu Demétrio, Rua São Borja, Rua James Adam, Alameda dos Uirapurus, Avenida Modesto Fernandes, Avenida Santa Izabel, Rua Nuno Álvares Pereira, Rua Prof. Djalma Bento, Rua Dr. Nestor Esteves Natividade, Rua Major Diogo, North Park Street, Jericho Street, Olmsted Road, Thoburn Court, Comstock Circle, Via Parma, Rue de l'Hôtel de Ville, Greenoaks Drive, Miramar Street

**Marisol Jiménez** is a composer and multidisciplinary artist from Guadalajara, Jalisco, Mexico. Currently working towards a doctoral degree in composition at Stanford University. Her output includes a number of chamber and electronic works, as well as installations and collaborations with visual and video artists. Her music has been performed by ensembles including the Arditti String Quartet, Ensemble Surplus, Ensemble Recherche, Ensemble Intercontemporain, International Contemporary Ensemble, the Freiburger Barockorchester, Ensemble Octandre, and SfSound.

**Chris Chafe** is a composer, improviser, cellist, and music researcher with an interest in computers and interactive performance. He has been a long-term denizen of the Center for Computer Research in Music and Acoustics where he is the center's director and teaches computer music courses. An active performer either on the net or physically present, his music is heard in Europe, the Americas and Asia. The five countries "Resonations" concert was hosted by the United Nations in Nov., 2009. CD's of works are available from Centaur Records. Gallery and museum music installations are continuing into their second decade with biological, medical and environmental "musifications" featured as the result of collaborations with artists, scientists and MD's. Upcoming new works include "Tomato Quintet" for the San Jose Biennial and "Siren Cloud" for CO2 sensors, duo guitar / piano and audience breath at the 2010 MiTo Festival.

**Ge Wang** is an Assistant Professor at Stanford University in the Center for Computer Research in Music and Acoustics (CCRMA), and researches interactive software systems for computer music, programming languages, mobile music, and education at the intersection of computer science and music. Ge is the author of the Chuck audio programming language, the founder and director of the Stanford Laptop Orchestra (SLOrk), and of the Stanford Mobile Phone Orchestra (MoPhO). Ge is Co-founder, CTO, and Chief Creative Officer of Smule, and the designer of the iPhone's Ocarina and the iPad's Magic Piano.

**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://slork.stanford.edu/> | <http://www.facebook.com/slork> | twitter: @slork

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