

North Carolina State University
Arts Studies Program and Music Department
Present the

Arts **NOW** Series

The Mathematics in Music

- a concert and conversation with

Elaine Chew

Featuring works by

Child, Diesendruck, Tcherepnin, Waschka



Ballroom, Student Center, North Carolina State University 24 March 2008 7pm

Program

Discussion of metrical permutations

Sudoku Variations* (2006)

East Coast premiere

Tamar Diesendruck

Discussion of tonal combinations

Doubles III * and **Epilogue** (1998-1999)

Peter Child

- three chinese songs: precious jewel, spring song, floating
- three malay songs: cockatoo, riversong, sampan variations
- epilogue (in memoriam William Albright)

Discussion of genetic algorithms by Rodney Waschka II

A Simple Gift for Elaine* (2008)

World premiere

Rodney Waschka II

Discussion of melodic transformations

Fêtes - Happy Birthday Variations (1975)

Ivan Tcherepnin

* pieces composed for Elaine Chew

No recording devices permitted. Turn off or throw away all electronic devices: phones, pagers, intergalactic communicators, brain pods, et cetera. Admission is charged for all Arts Now Series Events. Tickets available through Ticket Central.

Our Special Guest Performer: Elaine Chew

Elaine Chew, piano, has performed widely as soloist and chamber musician in the North America (the United States, and Canada), Asia (Singapore, China), and Europe (Finland, Scotland and Slovenia). She has appeared in concert at venues and festivals such as Los Angeles' Newman Recital Hall at USC, Zipper Hall as part of the Music of Changes concert series, Boston's Jordan Hall as part of the Foundation for Chinese Performing Arts Recital Series, and Victoria Concert Hall as soloist with the Singapore Symphony Orchestra in the President's Charity Concert. Chew has premiered compositions by, and worked with, contemporary composers Chen Yi, Peter Child, Chris Dench, Tamar Diesendruck, Jose Elizondo, John Harbison, Cecilia Heejeong Kim, Alba Potes, Eric Sawyer, Paul Schoenfield, and Ivan Tcherepnin. She has recorded Peter Child's *Doubles III*, written for her and based on songs from her childhood, and his *Trio* for violin, clarinet and piano (*Neuma Records*). Her performance of Ivan Tcherepnin's *Fêtes - Variations on Happy Birthday* can be heard on WGBH's Art of the States program.

Born in Buffalo, New York, Chew spent her childhood in Singapore, before returning to the United States for undergraduate studies at Stanford University and graduate studies at the Massachusetts Institute of Technology (MIT). A 1997 grant from the MIT Science and Technology Initiative (MISTI-China Program) resulted in a field study and numerous concerts on contemporary Chinese piano music. In 1998, she received MIT's prestigious Laya and Jerome Wiesner Award for her "*sustained, ubiquitous, unflinching enlightening contribution to our musical life at MIT*" (John Harbison). She subsequently served as Affiliated Artist of MIT's Music and Theatre Arts, and as founder and artistic director of the Aurelius Ensemble until 2000.

Chew joined the faculty of the University of Southern California Viterbi School of Engineering in 2001, where she founded and heads the Music Computation and Cognition (MuCoaCo) Laboratory. At USC, she is the first honoree of the Viterbi Early Career Chair, and Associate Professor of Industrial and Systems Engineering and of Electrical Engineering, and serves as Research Area Director of the Integrated Media Systems Center. In 2005, she was recognized "for her research on performer-centered approaches to computer-assisted music making, and for her efforts to integrated research and education at the intersection of music and engineering" by the prestigious Presidential Early Career Award for Scientists and Engineers. She holds diplomas and degrees in piano performance from the Trinity College, London, and Stanford University.

Tamar Diesendruck's favored compositional medium is virtuosic chamber music, although she has also composed solo, orchestral and vocal works. Her music is often characterized as having a very wide range of expression. Works include experimental pieces like "8 → ∞" for eight cellos (eight tends toward infinity), and unusually slow, stark music like "the grief that does not speak". Prof. Diesendruck's work has been performed throughout the U.S., and in Europe, by an array of excellent performers including the Pro Arte Quartet, Boston Modern Orchestra Project, Lions Gate Trio, Speculum Musicae, New Millennium Ensemble, Dinosaur Annex, Phantom Arts Ensemble, San Francisco Contemporary Music Players, New Century Players, League of Composers-ISCM, Earplay, Musica D'Oggi, Composers, Inc., Parnassus, Washington Square Contemporary Music, Prism Players, Music on the Edge, San Francisco Chamber Singers, Pittsburgh Youth Symphony Orchestra, Cabrini Quartet, pipa virtuoso Wu Man, avant garde violinist Carla Kihlstedt, pianist Donald Berman, and numerous other groups and soloists. Prof. Diesendruck earned an M.A. and Ph.D. in Composition from the University of California, Berkeley and a B.A. from Brandeis University. She teaches at the University of Southern California Thornton School of Music.

Peter Child is Professor of Music and MacVicar Faculty Fellow at MIT, where he chaired the department of Music and Theater Arts from 1996 to 1999. His composition teachers include William Albright, Bernard Barrell, Arthur Berger, Martin Boykan, Jacob Druckman (Tanglewood) and Seymour Shifrin. Child has been awarded an American Symphony Orchestra League-Meet the Composer "Music Alive" residency with the Albany Symphony Orchestra for 2005-08; he is also composer in residence with the New England Philharmonic Orchestra for the same period.

Ivan Tcherepnin, born in 1943, taught at Harvard University where he served as Director of the Electronic Music Studio from 1972 until his death in 1998. He studied with Leon Kirchner at Harvard and with Karlheinz Stockhausen, Henri Pousseur, and Pierre Boulez in Europe. After 1989, his music was influenced by the work of his friend John Cage. Tcherepnin's *Double Concerto for Violin, Cello, and Orchestra* (1995) won the Grawemeyer Award for Music Composition.

Rodney Waschka II, composer, is best known for his algorithmic compositions and his operas. His music has been performed throughout the world and is widely recorded. His most recent disc is "Music for Strings" recorded by the Nevsky String Quartet of Russia, on the Capstone label of New York. *Computer Music Journal* has called his opera, *Saint Ambrose*, "a milestone in the repertoire of computer music." Waschka is Professor of Arts Studies at North Carolina State University.