



March Matt-ness 2016



Bing Studio

Friday March 11th, 2016, 7:30pm

Saturday March 12th, 2016, 7:30pm

PROGRAM Friday March 11th

Ensemble Feedback Networks 24.0

CREATE Ensemble: Muhammad Hafiz Wan Rosli (feedback instrument), Matt Wright (computer), Hannah Wolfe (small computer, from UCSB), Karl Yerkes (computer)

Engine Etudes (short pieces for spherical speaker array interspersed throughout the program)

Edmund Campion (computer and CNMAT spherical loudspeaker array)

Auditory Fiction II (Edmund Campion)

Loren Mach and Dan Kennedy (two amplified log drums and computer)

Jōg

Ali Momeni (computer) and Matt Wright (computer)

[Intermission]

Raag Desh Malhar (classical Indian recital)

Manik Khan (sarod) and William Rossel (tabla)

Revisited Studies

Roberto Morales (flutes, piano, computer) and Matt Wright (computer)

Snagglepuss Remix

Mark Applebaum (after John Zorn)

Fear of Missing Something

Everyone

PROGRAM Saturday March 12th

Taqasim (2015)

Matt Wright (oud and computer)

Three pieces of Arabic art music

Ali Paris (vocals and qanoun), Briana Di Mara (violin), Scott Marcus (ney flute), Matt Wright (oud and electric guitar), and Faisal Zedan (percussion)

Ensemble Feedback Networks 25.0

CREATE Ensemble: CREATE Ensemble: Fernando Rincón Estrada (computer, from UCSB), Muhammad Hafiz Wan Rosli (feedback instrument), Matt Wright (computer), Hannah Wolfe (small computer, from UCSB), Tim Wood (Monotron), and Karl Yerkes (computer)

Unducracklelations

Lee Heuermann (voice and piano) and Matt Wright (oud)

[Intermission]

Limn, John MacCallum

Stacey Pelinka (flute) and Leighton Fong (cello)

improvised blinky code (2016)

Charlie Roberts (live coding)

A Drash, A Narrative, and a Prayer

John Schott (electric guitar) and Matt Wright (computer)

Never (2010)

Curtis Roads (live diffusion)

Fear of Missing Out on Something

Everyone

PROGRAM NOTES Friday March 11th

Ensemble Feedback Networks

CREATE

Ensemble

Ensemble Feedback Networks is a structured musical improvisation, where a variable number of players excite and control a sparsely-connected feedback delay network. We have been working with these ideas for the past 2+ years, including performances at the 2015 New Interfaces for Musical Expression conference in Baton Rouge and at the UCSB AlloSphere in 2016.

Each of our unique personal instruments manipulates a received audio input and incorporates it into the output. A digital patching matrix creates various connection topologies among the ensemble by mixing the instruments' outputs to form each instrument's input. Towards transparency, we present visualization of connection topologies and of each instrument's input/output (including spectrogram and estimates of I/O volume differential for quick and smooth timescales) to the audience.

Topologies with loops create feedback and can seem like a single group instrument whose behavior vitally depends on each performer's actions. As an ensemble, we explore several issues this raises. How do humans cybernetically adapt to these dynamic topologies? How to adapt our personal dynamics to the radical democratization of everybody's sound going through everybody's instruments and each member having a vital role with (some) total control at all times? What is the relationship between managing a complex system versus being managed by the system? How much control can we have over a densely-connected system? How do these challenges affect our musicianship?

Engine Etudes

Edmund Campion

The very short electronic fragments, created for this occasion and heard at various moments throughout this evening, are based on a corpus of electronic phrases that were originally made for *The Last Internal Combustion Engine*, a work commissioned by the Santa Rosa Symphony in 2012. At the center of *Engine Etudes* is CNMAT's and Meyer Sound's Spherical Loudspeaker Array, designed by Adrian Freed, Rimas Avizienis, Andy Schmeder, John MacCallum, David Wessel and others. The small array at top has 120 independently controlled 1-inch-diameter loudspeakers. The speaker interfaces to a computer using gigabit ethernet and appears as a system audio device with 120 output channels. Composers and researchers John MacCallum, Ilya Rostovtsev, and Jeff Lubow all contributed to the technologies used to generate the electronic phrases. The electronic phrases were composed using a feature-based corpus of percussion instruments samples (about 2000 individual samples), and a version of MacCallum's "timewarp" time-map tools.

Auditory Fiction II

Edmund Campion

Composed for the ECO Ensemble percussionists Dan Kennedy and Loren Mach, *Auditory Fiction II* was premiered at the Venice Biennale for Music in 2014. Each piece in the *Auditory Fiction* series features live musicians performing with the aid of computer generated in-ear click tracks. Inaudible to the audience, the special cueing sounds provide auditory timing instructions to the performers via headphones. With the click tracks in place, the musicians are enabled to perform any independent tempo relationship: accelerate, decelerate, change phase, and at any rate. The techniques involved depend on the "tempocurver" software

tools designed and developed at the Center for New Music and Audio Technologies (CNMAT) primarily by John MacCallum and Matthew Wright with design support from Ed Campion and others.

In 1970, Steve Reich created *Drumming (Part I)*, a piece for four percussionists who use a West African inspired performance practice where the musicians play at slightly different and dynamically shifting tempi. This difficult-to-master technique creates fascinating and ever-changing patterns derived from simple base rhythms. *Auditory Fiction* formalizes this approach, and allows independent and dynamically flexible tempi to be designed and executed by human performers. Computers and digital sound have been capable of calculating and performing in this manner for decades. But the story is evolving now that these special affordances are shaped into tools for music composition and live performance. Yet even as the software opens up new vistas in music timing, it also provoke new questions and creates new difficulties in performance practice and aesthetics.

Alternate models of music time that move beyond the single master clock paradigm certainly exist. But the problem for the Western trained composer is how to write down the results, how to compose with it, and how to transmit the performance instructions. *Auditory Fiction* combines aural support (in-ear clicks) with new scoring methods that together enable fine-grain control over multiple and simultaneous streams of time.

In *Auditory Fiction*, the musicians become capable of performing feats of temporal magic; acts that defy perceptual logic and sometimes cause the listener to hear things that are not actually present. All the while, the performers must remain tethered to the digital clockwork as they act out the instructions and on schedule. This tension between the human and the technological, the musical and the non-musical, is what creates the *Auditory Fiction*. In tonight's performance, the two percussionists play only two amplified wooden drums. This is my small homage to Steve Reich and a reminder that new ways of doing things should start simple. Outside of amplifying the instruments, there is no other electronic or digital processing in the piece. An attentive listener might hear something unreal, fictitious, or even suspicious. For me, the unseen technological force drives the musical outcome into the realm of fiction. The musicians are actors who deliver a message relating as much to computation and perception of time as to what it means to be and remain human in a hyper-technological era.

Jōg

Matthew Wright and Ali Momeni

This improvisation is based on *Raag Jog*, a North Indian late evening Raga from the *Khamaj thaat* (corresponding to the mixolydian mode in ascent, but with a minor third above the root in descent). This performance combines Matt's drawing tablet and feedback network instruments with Ali's multiphonic synthesized voice instrument. True to its namesake, this performance attempts to create *jog*--a state of enchantment.

Raag Desh Malhar

Manik Khan (sarod) & William Rossel (tabla)

The classical music of North India is among the oldest continual musical traditions of the world, dating back thousands of years. Each performance's melodic content is structured by a *raag*, tonight *Raag Desh Malhar*, an evening melody meant for the rainy season will be expressed. The emotions associated with Desh Malhar are joy and pathos. The performance will begin with a brief *alap* (a melodic introduction without percussive accompaniment), followed by a *gat* in the 16-beat rhythm cycle called *Sitar Khani*. The piece will be presented in the traditional manner, composed on the spot, according to what the musicians feel.

Revisited Studies

Strong Flutes. Mellow flutes. Spectral/bells. Super French chord. Mellow piano. Images. Crazy piano. Super crazy. Conch.

Snagglepuss ReMix

Mark Applebaum

Among the sounds and ideas that have influenced my composition, none have been more profound than the violent collisions of contrasting materials heard in much of John Zorn's work. And among those pieces, the dense two minutes of *Snagglepuss* performed by Naked City have become for me the most luminous, iconic, and persuasive. **Snagglepuss ReMix**, a 2-channel tape piece dedicated to Zorn, is fashioned exclusively out of samples from the original recording of *Snagglepuss*. Very simple computer operations—often carried out to obsessive excess—transform the original into this loving/spitting remix. And while Zorn's original piece is already a kind of warped and mangled musical Frankenstein, I have grown up with this recording to such an extent that it has become a kind of primary text, a cultural statement of great authenticity worthy of its own celebration/mutilation.

PROGRAM NOTES Saturday March 12th

Taqasim

Matthew

Wright

In Middle Eastern music a *taqasim* is a solo instrumental melodic improvisation. This piece asserts a common ground between a traditional *taqasim* played on the oud (fretless Middle Eastern lute) in *maqam rast* and the expanded tonal and timbral possibilities of computer generated sound. Much of the pitch material is based on the pure 4/3 interval often used to tune the oud's strings (leading to Pythagorean intonation over a spiral of fifths and fourths), also sometimes transposed down several octaves to the perceptual regime of rhythm.

Three pieces of Arabic art music

a. Sama'i Nahawand "Sihr ash-Sharq," composed by Abdul Mu'nim al-Hariri - *Sama'i* is a classical instrumental form with roots in Ottoman Turkish practice. Introduced into the eastern Arab world in the late-19th century, *sama'i*s all have a standard structure: four verses (*khana*) each followed by a recurring refrain (*taslim*), in the slow 10-beat *sama'i thaqil* rhythm (D--T-DDT--) and with the fourth *khana* in a contrasting rhythm, here a lively 6. al-Hariri (1924-1989), a celebrated Egyptian composer and violinist, set this *sama'i* in the *Nahawand* melodic mode (*maqam*) corresponding to the western minor scale. The composition shows several of *Nahawand*'s classic modal modulations.

b. Jalla Man Qad Sawwarak ("Great is He who molded/created you") is a song in the *muwashshah* genre. The *muwashshah* song genre was developed in medieval Andalusian Spain and later spread throughout the

Arab world. A songbook written in Cairo in 1840 contains the lyrics of over 350 of these songs, providing evidence that the *muwashshah* had become the dominant form of art song in the eastern Arab world. Performances commonly featured suites of a dozen or more songs, all set to the same melodic mode (*maqam*). Each suite would start with songs in the weightiest/heaviest rhythms, and progress through a series of ever-lighter rhythms, ending finally with one or more songs set in lively 6/8 rhythms. While *muwashshah* songs remain beloved for many today, newer song forms (for example, the *ughniya* and modern pop genres) have largely taken over in the repertoire of most performing artists. *Jalla Man Qad Sawwarak* is set in *maqam Bayyati* in a 7-beat rhythm. This song has been widely recorded by famed Syrian singers including Sabri Mudallal and Sabah Fakhri.

Jalla Man Qad Şawwarak (Great is He who created you) جل من قد صورك

a traditional muwashshaḥ

<p>jalla man qad şawwarak badri min mā'in wa ṭīn wa ja'al fī maṭḥharak bahjata li-n-nāṭhirīn</p>	<p>جل من قد صورك بدر من ماء وطين وجعل في مظهرك بهجة للناظرين</p>
<p>riqq wa arḥam moghramā dhāba min harri l-anīn as'alu llāh yaḥrusak min 'uyūn il-ḥāsīdīn</p>	<p>رق وارحم مغرما ذاب من حر الأتین أسأل الله يحرسك من عيون الحاسدين</p>
<p>yā ḥabībī wi-n-nabī ikhtaşir hadhā l-kalām yakfī mā qad ḥalla bī min şudūdaka wa l-maṭāl</p>	<p>يا حبيبي والنبي اختصر هذا الكلام يكفي ما قد حل بي من صدودك والمطال</p>
<p>fī hawāk 'aqlī subī wa ilayka l-qalbu hām wa hawāk yā rabrabī bahjata li-n-nāṭhirīn wa hawāk yā rabrabī fitnatu li-n-nāṭhirīn</p>	<p>في هواك عقلي سبي واليك القلب هام و هواك يا ربربي بهجة للناظرين و هواك يا ربربي فتنة للناظرين</p>

Great is He who molded/created you wondrously from water and clay
And made your appearance a delight for onlookers

Be tender and merciful to the lover who has melted from the heat of longing
I ask God that He protect you from the envious eyes

My darling, [I swear by] the Prophet, shorten this talk
Enough of what has befallen me from your aloofness and distance

In your love my mind is captivated and [my] heart has fallen in love
And your love, O my desirable one, is a joy to the onlookers
And your love, O my desirable one, is a temptation for the onlookers

translation: Scott Marcus, Jonathan Glasser

UCSB Middle East Ensemble

c. A portion of the song *Inta ‘Umri* (“You are my life”), composed by Muhammad ‘Abd al-Wahhab (c.1905-1991) for the superstar Egyptian singer, Umm Kulthum (c.1904-1975). Premiered in Cairo in 1964, this song created a huge sensation since it brought together the talents of the two most famous 20th-century Arab artists for the first time.

Umm Kulthum enjoyed a career that spanned over five decades. Starting with village performances as a child, she moved to the big city, Cairo, in 1924 to further her career. Within a few years, she was recognized as the premier singer of her day, a reputation that continued to grow exponentially throughout the rest of her life.

‘Abd al-Wahhab subsequently composed nine other songs for Umm Kulthum. *Inta ‘Umri* consists of four sections: an initial refrain followed by three verses, each verse ending with a return to the refrain. Tonight, we perform only the song’s instrumental introduction and the much-loved refrain.

Inta ‘Umri (You are my life!) انت عمري

The 1st song that Muḥammad ‘Abd al-Wahhāb (c.1905-1991) composed for Umm Kulthūm (c.1900-1975), set to a poem by Aḥmad Shafīq Kāmil, premiered in 1964.

رجعوني عنك لأيامي اللي راحوا
علموني أندم على الماضي وجراحه
اللي شفته قبل ما تشوفك عنيه
عمر ضايع يحسبوه إزاي عليّ
انت عمري اللي ابتدي بنورك صباحه

refrain:

ragga‘ūnī ‘aynek li-ayyāmī illī rāḥū
‘allimūnī andam ‘alā l-māḍī wi-girāḥuh
illī shuftuh ‘abl mā tshūfak ‘ayneyya
‘umr ḍāyī‘ yaḥsibūh izzāyy ‘alayya
inta ‘umrī illī ibtadā bi-nūrak ṣabāhuh

Your eyes bring back to me days long past
They have taught me to regret the past and its wounds.
Whatever I saw before I laid my eyes on you,
is a lifetime now lost, how could it be reckoned as mine?
You are my life! My life begins its morning with your light!

Ensemble Feedback Networks

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Unducracklelations

Matthew Wright and Lee Heuermann

The opening of this improvisation explores the timbral (noise) and spatial possibilities of the oud and voice – how they clash or blend with each other, as they both have the capabilities of being both percussive and fluid. They develop various forms of undulations that are inherent in both the oud and voice, shifting from tremolos to pulsations to a sound mass with emergent melodies. The piano then juxtaposes the oud's open-string tuning with contrasting harmonies.

Limn

John MacCallum

Limn consists of two parts: a duo for flute and cello, written for Stacey Pelinka and Leighton Fong of the Left Coast Chamber Ensemble; and a live electronic part premiered at the SummerWorks Performance Festival in Toronto as part of a collaboration called *Synchronism* with choreographer Teoma Naccarato.

In the flute and cello duo, the two performers negotiate long, gradual changes in tempo that diverge from each other from the very start of the piece. As they are learning the piece, the musicians rely on click tracks to keep their parts aligned, but ultimately play without them in concert. The slow shifts in tempo create a performance context in which the two players cannot synchronize in the ways that they have grown to be familiar with. Instead, they must negotiate the dynamically changing relationship between their part and that of the other, dispensing with the temporal relationships prescribed in the score and instead relying on situated action in the exploration of a more rich notion of what it means to play together. This work owes much to Matt Wright's initial explorations of tempo-curving software in collaboration with Edmund Campion and myself at CNMAT.

The audio drawn from *Synchronism* consists of traces from a series of intimate, one-on-one encounters in which Naccarato and a participant, in an enclosed space away from public view, place electronic stethoscopes and vibrotactile transducers on each other's bodies, stimulating sites of observation and pulsation as they negotiate and explore issues of mutual trust, consent and boundaries. The stethoscope tracks are manipulated and obscured, and then projected outwards to the public. In the concert version, we hear recordings of an anonymous encounter between two people, extracted from the original bodies and environment, and redistributed in a new, shared context.

improvised blinky code

Charlie Roberts

In this live-coding performance, I create musical patterns that are dynamically annotated by the coding environment. The source code becomes a dancing document as ever-changing annotations provide the potential for improved audience understanding of the algorithms at play. The performance is given in the

live-coding environment *Gibber* (<http://gibber.cc>), which was created for my dissertation; Matt provided valuable insight, testing, and collaboration throughout *Gibber*'s development as one of my committee members at UC Santa Barbara. Accordingly, he is solely to blame for any typographical errors that may occur during the course of this performance.

A Drash, A Narrative, and A Prayer

Matthew Wright and John Schott

[John Schott writes:] The music Matt and I have made together over almost twenty years has taken many forms, and challenges and rewards me in a way different from other collaborations. It seems to provoke in me fundamental questions of how music is organized and experienced. Usually at the beginning of each project, the very atoms of musical experience - notes, pulse, melody, rhythm - present themselves to me as if we had barely met, and some very basic paths to travel begin to appear. Often this takes the form of me saying "Could it do *this*?" Matt thinks for a moment and then begins programming. Each time is different, but with a strong through-line: our shared devotion to making music, being "in the moment", and creating beauty that surprises us.

***Never (2010)* in three parts [7:30]**

Curtis Roads

Never, a piece in three parts (*Never never*, *Never again*, *Never more*), is a sequel to my composition *Now* (2003). It stands as an ode to what could not be: the imaginary. The work began as an exploration of higher-order granulation processes, i.e., regranulations of previously granulated textures. Specifically, *Never* is the result of a third-order granulation process, being a regranulation of *Now*, which was itself a regranulation of *Volt air, part III* (2003). The granulation process was, however, merely a starting point for composition. I then edited the granulated textures in detail over a long period to make the finished work.

Never is not only the product of recycling of pre-existing material, it is also to a large extent made out of replications of parts of itself. That is, in building a basic skeleton for all three movements I used up all the original granular material. However, it was obvious that I would need more sound material to complete the piece. Thus I began to extract fragments from the skeleton—both small and large—to create new sounds by means of various transformations. The final work is replete with internal redundancies, replications of material rearranged so as not to be literal repetitions.

ABOUT THE ARTISTS

Mark Applebaum, Ph.D., is Associate Professor of Composition at Stanford University. His solo, chamber, choral, orchestral, operatic, and electroacoustic work has been performed throughout North and South America, Europe, Australia, Africa, and Asia, including notable commissions from the Merce Cunningham Dance Company, the Fromm Foundation, the Kronos Quartet, and the Vienna Modern Festival. Many of his pieces are characterized by challenges to the conventional boundaries of musical ontology: works for three conductors and no players, a concerto for florist and orchestra, pieces for instruments made of junk, notational specifications that appear on the faces of custom wristwatches, works for an invented sign language choreographed to sound, amplified Dadaist rituals, a chamber work comprised of obsessive page turns, and a 72-foot long graphic score displayed in a museum and accompanied by no instructions for its interpretation. His TED talk has been seen by more than one million viewers. Applebaum is also an accomplished jazz pianist and builds electroacoustic sound-sculptures out of junk, hardware, and found objects. At Stanford Applebaum is the founding director of [sic]—the Stanford Improvisation Collective. He serves on the board of Other Minds and as a trustee of Carleton College.

Edmund Campion is currently Professor of Music Composition and Director at the Center for New Music and Audio Technologies (CNMAT) at UC Berkeley. He has received the American Rome Prize, the Lili Boulanger Prize, The Paul Fromm Award at Tanglewood, and most recently, the Goddard Lieberman Fellowship given by the American Academy in Rome. Recent commissions include the 2011 *Commande d'état* for *Wavelike and Diverse*, written for *Les Percussion des Strasbourg* and released on the ensemble's 50th anniversary Universal CD collection; *Auditory Fiction* (2011), commissioned by *Société Générale* for Radio France; *Small Wonder (The Butterfly Effect)* (2012), commissioned by the Serge Koussevitzky Foundation for the San Francisco Contemporary Music Players; *Auditory Fiction II* (2014), written for the ECO Ensemble for the Venice Music Biennale. In 2012, while Composer in Residence with the Santa Rosa Symphony, Campion was commissioned for the *The Last Internal Combustion Engine*, written for full orchestra, Kronos Quartet and electronics. Joshua Kosman of the San Francisco Chronicle called the piece “a vivid and richly imagined concerto.” Last year, the famed Ensemble Intercontemporain co-commissioned Campion and audiovisual artist Kurt Hentschläger for the 25-minute, *Cluster X*. (<http://edmundcampion.com/>) (<http://cnmat.berkeley.edu/>).

Briana Di Mara has been playing violin since age 6. She was trained in classical music with the Suzuki Method and has since gone on to study a variety of traditional styles including Irish, English, Greek, Turkish, Persian, Afghan, and Arabic. She has been influenced by master musicians from all corners of the world, and this has harmoniously blended into her own unique style on the violin. She has performed and recorded with numerous artists, including Stellamara, Moh Alileche, Aywah, Diana Strong and Myra Joy, Silk Road Caravan, La Ruya, Faisal Zedan, Gary Haggerty, Melita Silberstein, and Daniel Fríes. These projects have led her to perform in a wide variety of musical venues, theaters and festivals all across California and beyond. It is a privilege to share the music that is food for her soul.

Fernando Rincón Estrada is a Colombian composer based in Santa Barbara, California. His work is focused mainly on chamber music performance involving acoustic and mixed media performances. Rhythm and timbre are recurrent materials through his compositional work, and presently both sound spatialization and microtonality are research interests for the development of his creative work as well. At the moment he is a Ph.D. student of the Music Composition program at UCSB. His music has been performed in the Netherlands, France, Austria, Mexico, Uruguay, Argentina, U.S., and Colombia.

Leighton Fong, longtime member of Left Coast Chamber Ensemble, is Principal Cellist of the California Symphony. He plays regularly with Eco Ensemble and Empyrean Ensemble, and was a member of the SF Contemporary Players. Mr. Fong studied at the SF Conservatory, the New England Conservatory, the Bern Conservatory in

Switzerland, and the Royal Danish Conservatory in Copenhagen, Denmark. He has taught at UC Berkeley since 1997.

Lee Heuermann, composer/singer, pianist, and flutist, is a freelance artist living in Berkeley. Most recently, Heuermann performed her work *Being Peace*, at the 3rd Annual International Conference of Young Buddhists and Scientists in Hong Kong (2013) and is involved in an ongoing collaborative project with Chris Chafe and Cecilia Wu (*Being Peace* and the Power of the Voice). Additionally, her composition *Ridge of Blue Longing*, was the 2011 recipient of the Judith Lang Zaimant Prize from the International Alliance for Women in Music (IAWM). Lee loves collaborating, working with poet Prageeta Sharma, on the dramatic song cycle *A Lesson In American History*, based on the life of suffragist, Alice Paul. As a singer, Lee specializes in contemporary music and experimental jazz and is an improvisational pianist. She is also the recipient of a National Endowment for the Arts/Interarts Rockefeller Foundation Fellowship. Her interests include contemplative practices, sound in the natural world, and researching the nature of vocal timbre cross-culturally.

Percussionist **Daniel Kennedy** is a specialist in the music of the Twentieth Century, and is a member of Earplay and the Emyrean Ensemble. He received his M.F.A. degree from the California Institute of the Arts and his D. M. A. from the State University of New York at Stony Brook. Mr. Kennedy, who has recorded widely, is both Instructor of Percussion and Artistic Director of the Festival of New American Music at California State University, Sacramento.

Manik Khan is the youngest son of the late maestro, Ustad Ali Akbar Khan, whose own father, the late Acharya Baba Allauddin Khan, is acknowledged as one of the greatest figures in North Indian music of the 20th century. This family traces its gharana (ancestral tradition) from Mian Tansen, a 16th century musical genius and court musician of Emperor Akbar, to Mohammed Wazir Khan, court musician of Rampur State and Baba Allauddin Khan's guru. Maestro Ali Akbar Khan was one of India's most accomplished classical musicians, a "National Living Treasure" in India, MacArthur "genius", and admired by musicians worldwide for his brilliant compositions and mastery of the sarod. The late Lord Yehudi Menuhin called him "an absolute genius...the greatest musician in the world." Manik began his training on the sarod with his father at the age of 13 (around when Matt also began his 7 years as a vocal and sarod student at the Ali Akbar College of Music). He currently teaches, performs, and works to preserve and nourish his family's rich musical legacy within India's cultural history. Alongside a solo concert career, he has worked with various ensembles to present his father's music in new ways, including bringing Indian Classical Music to local high school orchestras and performing in a 'West Meets East' collaboration alongside Michael Morgan conducting the Fremont Symphony Orchestra. He resides in the San Francisco Bay Area, where he continues his musical studies with his elder brother, Alam Khan. Please visit www.aacm.org to learn more about the Ali Akbar College of Music or Indian Classical Music in general.

John MacCallum is a composer based, since 2004, in Oakland, CA. From 2008–2011 he held a position as Musical Applications Programmer at the Center for New Music and Audio Technologies (CNMAT). While there, he designed a number of software tools including one useful for composing and performing music with multiple, independent, smoothly-varying tempos, building on and extending earlier work by Matt Wright, Edmund Campion, Ali Momeni, and David Wessel. This work resulted in his composition *Aberration* (2010) for percussion trio, the recording of which was supported by a grant from the American Composer's Forum, and *The Delicate Texture of Time* (2012-13) for eight players commissioned by the Eco Ensemble with a grant from the Mellon Foundation. In addition to his interest in polytemporal music, MacCallum's compositional work is heavily reliant on technology both as a compositional tool and as an integral aspect of the performance of a piece. His works often employ carefully constrained algorithms that are allowed to evolve differently and yet predictably each time they are performed. John holds degrees from the University of California, Berkeley (Ph.D. in Music Composition), McGill University (M.M. in Composition), and the University of the Pacific (B.M. in Composition/Theory).

Percussionist **Loren Mach** is passionate about the arts as they relate to our 21st century world and all who inhabit it. A graduate of the Oberlin and Cincinnati Conservatories of Music, he has premiered countless solo, chamber, and

orchestral works. Mach is a member of Eco ensemble, the San Francisco Chamber Orchestra, Worn Chamber Ensemble, and co-founder of Rootstock Percussion. He often performs with the San Francisco Symphony, many Bay area symphony and opera orchestras, or in the pit of hit Broadway shows like *Wicked*. But Mach prefers making new music in more intimate settings with groups like San Francisco Contemporary Music Players, Left Coast Chamber Ensemble, Empyrean Ensemble, Earplay, and sfSound Group. In recent summers he has performed at the Cabrillo Festival of Contemporary Music and was guest artist with Dawn Upshaw and eighth blackbird at the Ojai Music Festival. Mach's other passions involve our fundamental relationship to food as a form of communion with others and our interconnectedness with the natural world around us.

Scott Marcus teaches in the Music Department at UCSB, where he founded and directs the UCSB Middle East Ensemble (of which Matt was a happy member 2008-15).. He studied Middle Eastern music at UCLA under Ali Jihad Racy and in Cairo, Egypt. Scott is the author of *Music in Egypt*, a volume from Oxford University Press that describes seven different music traditions in 20th-21st century Egypt (with accompanying CD). In addition to teaching at UCSB, Scott also teaches at the annual week-long workshop, *The Mendocino Middle East Music and Dance Camp*.

Ali Momeni was born in Isfahan, Iran and emigrated to the United States at the age of twelve. He studied physics and music at Swarthmore College and completed his doctoral degree in music composition, improvisation, and performance with computers from CNMAT. He spent three years in Paris where he collaborated with performers and researchers from La Kitchen, IRCAM, Sony CSL, and CIRM. Between 2007 and 2011, Momeni was an assistant professor in the Department of Art at the University of Minnesota in Minneapolis, where he directed the Spark Festival of Electronic Music and Art, and founded the urban projection collective called the MAW. Momeni is currently an associate professor in the School of Art at Carnegie Mellon University where he directs CMU's ArtFab, co-directs the CodeLab, and teaches in IDEATE and Emerging Media Programs.

Roberto Morales-Manzanares started his musical training in national folkloric music and learned how to play harps and different kinds of guitars and flutes from several regions of Mexico. As a composer, he has written music for theater, dance, movies, TV, and radio. As an interpreter Morales-Manzanares has participated on his own and with other composers in forums of jazz, popular, and new music, including tours to Europe, the United States, and Latin America. His main interests are algorithmic composition and real-time gesture interaction. Currently he teaches Digital Art at the University of Guanajuato and is member of the *Sistema Nacional de Creadores* in Mexico.

Ali Paris captivates audiences worldwide with his unique fusion of Middle Eastern and Western music styles. He accompanies his singing with his instrument, the qanun, a rare 76-string zither that dates back to the 14th century. Ali's music education began at the age of 5 in his native countries of Morocco and Palestine studying Arabic traditional music with master Simon Shaheen. He quickly became known as a child prodigy, performing by age 9 and touring internationally by the age of 12. Since then he has received multiple international awards including the National Heritage Award Artist of the Year (2004-2007) and relocated to the United States to earn his degree at the prestigious Berklee College of Music. He has collaborated with a long list of world-renowned artists such as Alicia Keys (who described Ali as "one of the most eclectic and diverse artists"), Quincy Jones (who called Ali an "unrivaled unique artist"), Javier Limon, and Bobby McFerrin. He has performed solo at the Newport and the Istanbul Jazz Festival, the White House to the Royal Palace in Jordan to play for both the President of Palestine and the Queen of Jordan. He has appeared as a soloist with the Boston Symphony Orchestra and the Michigan Philharmonic, and is featured in the renowned Grammy-winning Spanish documentary *Entre2aguas* and the Hollywood movie *Noah*. Ali has also collaborated with numerous world-renowned artists to benefit the work of Doctors Without Borders including a duet song with Spanish star Alejandro Sanz. Ali Paris tours extensively with his group *Ali Paris Quartet*. These performances are marked not only for their brilliant musical genius, but also for their exploration of fertile ground in the crossover between Eastern and Western cultures and music genres.

Stacey Pelinka is a longtime member of the Left Coast Chamber Ensemble and a founding member of the Eco Ensemble, in residence at CNMAT, UC Berkeley. Stacey plays principal flute with San Francisco Opera's Merola

Program productions, second flute with the Berkeley Symphony, the San Francisco Chamber Orchestra, and the Midsummer Mozart Festival, and piccolo with the Santa Rosa Symphony, and serves on the faculty of UC Davis and UC Berkeley as a flute instructor. She freelances throughout the Bay Area, performing frequently with Opera Parallèle, sfSound, the San Francisco Contemporary Music Players, and Earplay. A certified Feldenkrais Method® practitioner, Stacey teaches weekly Feldenkrais lessons for musicians at the San Francisco Symphony. She attended Cornell University and the San Francisco Conservatory, where she studied with Timothy Day. Stacey lives in Berkeley with her daughter Annabelle.

Curtis Roads is Professor of Media Arts and Technology, with an affiliate appointment in Music at University of California, Santa Barbara. His new book is *Composing Electronic Music: A New Aesthetic* (2015, Oxford University Press).

Charlie Roberts is an Assistant Professor in the School of Interactive Games and Media at the Rochester Institute of Technology, where his research focuses on human-centered computing in creative coding environments. He is the primary developer of the live coding environment *Gibber*.

Gifted artist and teacher **William Rossel** has been a disciple of legendary tabla maestro Pandit Swapan Chaudhuri since 2006, both at the Ali Akbar College of Music and at the California Institute of the Arts where in 2016 he earned a Master's degree in Tabla Performance. In addition to tabla, he has also extensively trained in the musics of Bali, Uganda, Ghana, Mali, and others. William currently teaches World Music on the faculty of the Yuba College Music Department, tabla at the Ali Akbar College of Music in San Rafael, and music classes through a non-profit arts education organization known as Youth in Arts.

Muhammad Hafiz Wan Rosli is a Ph.D. candidate at the Media Arts and Technology program (UC Santa Barbara). He received a BFA in New Media from Universiti Sains Malaysia, and an MFA in Computer Art from the School of Visual Arts. His current research area includes visualization, sonification, spatial audio, auditory scene analysis, music information retrieval and synthesis techniques. He was also the CREATE Technical Coordinator.

John Schott is a guitarist, composer, and teacher who lives in Berkeley. His CDs include *T.J. Kirk* and *If Four Was One* (Warner Bros.), *In These Great Times*, *What Comes Before*, and *Actual Trio* (Tzadik), *Shuffle Play: Elegies for the Recording Angel* (New World Recordings) and *Typical Orchestra* and *Drunken Songs For Sober Times* (Smash The State!). He has also appeared on records by Tom Waits, John Zorn, Henry Kaiser, the Rova Sax Quartet, and the Baguette Quartette. He regularly performs with the Paul Drescher Electro-Acoustic Ensemble and is, slowly, writing a book on the late music of John Coltrane.

David Wessel (1942-2014) was the founding Director of CNMAT, which opened in 1988 (the same year Matt entered Cal as a freshman). He performed as a professional jazz drummer in high school, earned a B.S. in mathematical statistics from the University of Illinois in 1964 and a Ph.D. in mathematical psychology at Stanford University in 1972, and conducted research and taught at SF State University and Michigan State University before moving to Paris to conduct research at the French *Institut de Recherche et Coordination Acoustique/Musique* (IRCAM). David began Matt's career by hiring him at CNMAT and subsequently mentoring in research and life, with many fruitful collaborations. This entire concert is dedicated in David's honor.

Hannah Wolfe is pursuing her Ph.D. in MAT at UCSB. Her research interests include physical computing, human robot interaction, bio-mimicry, interactive environments and technology education. She received her bachelor's degree in Art Influenced by Math and Science from Bennington College.

Tim Wood is currently a graduate student in the MAT program at UCSB, where he studies interactivity, algorithmic processes, and how new technology can relate to the body, nature, and the physical world.

Matthew Wright curated and organized these concerts featuring his music, his musical collaborations, and the music of some of his mentors and inspirations. After earning a BA in Music and Computer Science at UC Berkeley in 1993 he joined CNMAT as a computer music researcher, where he focused on building and composing computer-based instruments for interactive, often improvised, live performance and became known for helping create and disseminate the SDIF and OSC protocols. There he worked with David Wessel, Adrian Freed, and later Edmund Campion and students including Roberto Morales, Ali Momeni, and John MacCallum. In 2003 he entered the CCRMA Ph.D. program, where his dissertation concerned computer modeling of the perception of musical rhythm: "The Shape of an Instant: Measuring and Modeling Perceptual Attack Time with Probability Density Functions." He spent 2008-9 as a visiting research fellow at the University of Victoria on the theme of "Computational Ethnomusicology" developing tools for analysis and visualization of detailed pitch and timing information from musical recordings. Then at UC Santa Barbara he wore many hats, including Research Director of the Center for Research in Electronic Arts and Technology (CREATE - of which Curtis Roads is Associate Director), Principal Development Engineer for the AlloSphere, a 3-story full-surround immersive audiovisual instrument for scientific and artistic research (directed by JoAnn Kuchera-Morin), Lecturer, Associate Researcher, and founder and Director of the UCSB Afro-Brazilian Ensemble and of the CREATE Ensemble (which survives today thanks to the ability to rehearse and perform "telematically," i.e., over the Internet). Since August he has been CCRMA's Technical Director.

Karl Yerkes develops audiovisual musical systems for ensemble performance using embedded and distributed technologies. As a Ph.D. candidate at UCSB he works in the AlloSphere and the SYSTEMICS Lab. As Artist in Residence at the SETI Institute he collaborates with NASA scientists on multimedia works about the search for extraterrestrial life.

COMING SOON TO CCRMA

TOMORROW OCTOBER 2nd

7:30 pm Bing Studio

March Matt-ness PART 2

SUNDAY MARCH 13th

7:30 pm CCRMA Stage

cmetq - an opera - Christopher Jette, composer and Nathan Krueger, baritone

March Mattness 2016 was generously sponsored by CCRMA and by the Mark and Joan Applebaum Concert Fund.

Thanks to all those who helped organize and run this event, including Stephanie Akers, Eoin Callery, Chris Chafe, CNMAT (UC Berkeley Center for New Music and Audio Technologies), Drew Farley, Victoria Grace, Jay Kadis, Elliot Kermit-Canfield, Dave Kerr, Sara Langland, Sasha Leitman, Shu Yu Lin, Fernando Lopez-Lezcano, Romain Michon, Egan O'Rourke, Jeremy Ramsaur, SLOrk (Stanford Laptop Orchestra), Ge Wang, Nette Worthey, Derek Wright, and David Zicarelli.

No food, drink or smoking is permitted in the building.
Cameras and other recording equipment are prohibited.
Please ensure that your pager, cellular phone and watch alarm are turned off.
<http://ccrma.stanford.edu/concerts/>