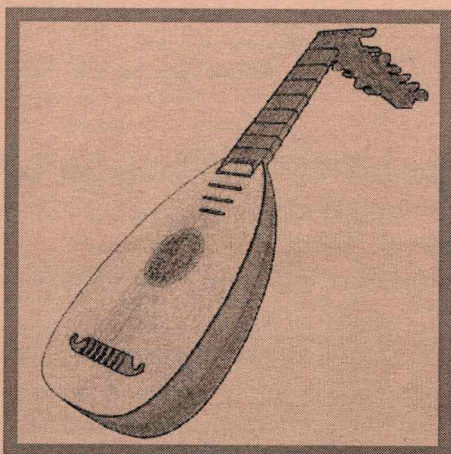
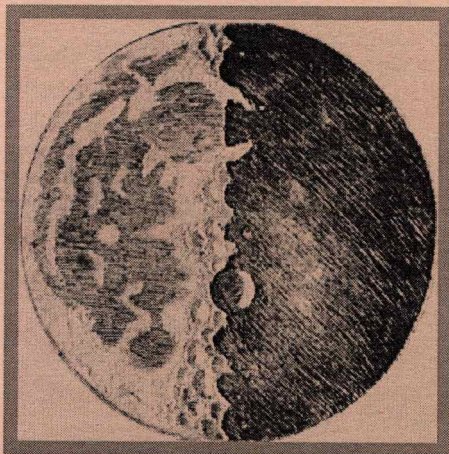


SCIENCE

MUSIC



PERPETUAL MOTION

Revolutions in 17th-Century Science and Music

Dava Sobel, storyteller

Ronn McFarlane, lute & theorbo

Galileo's Daughters

Sarah Pillow, soprano

Mary Anne Ballard, viola da gamba

Marc Wagnon, video artist

Friday, February 6, 2009

Margaret H'Doubler Performance Space

University of Wisconsin-Madison

Program

The program will be presented without an intermission.
(The performers thank you in advance for holding your applause until the end,
and for silencing cell phones and other sounding devices.)

Part One: Apollo: God of the Sun, Father of Orpheus

Ricercar No. 4

Francesco da Milano, Intabolutura di liuto, 1536

Part Two: Power of the Gods: the Naming of the Planets

Excerpt from *La Calisto* (1652)

Francesco Cavalli (1602-1676)

(Juno at the Plain of the Erymanthus River)

Part Three: Harmony between the heavens and the Earth

Catena d'Amor (1602)

Cesare Negri (c. 1535 - c. 1605)

Il Romeo

Barbara Strozzi (1619 - 1677)

Part Four: A Renaissance Man: Vincenzo Galilei, Lute Player and Humanist

Vestiva i colli (Giovanni Pierluigi da Palestrina)

Vincenzo Galilei (1520-1591)

Il Fronimo 1568

Part Five: Return to Nature: The Birth of Opera and Scientific Discovery

Tutto'l di piano

Giulio Caccini (1551-1618)

Le Nuove Musiche 1602

Canzona sesta detta l'altera

Girolamo Frescobaldi (1583-1643)

Primo Libro delle Canzone 1628

Lamento d'Arianna

Claudio Monteverdi (1567-1643)

from the lost opera *Arianna* 1608

Part Six: Celestial Sirens: Musical Art of the 17th-Century Convent

Bianco Fiore

Cesare Negri

Sonet vox tua in auribus cordis mei

Lucrezia Orsina Vizzana (1590-1662)

Componimenti musicali 1623

Part Seven: Perpetual Motion: the Setting of the Sun

Laudate dominum (Psalm 150)

Claudio Monteverdi

Evening Hymn

Henry Purcell (1659-1695)

Texts and Translations

La Calisto: Giunone

Dalle gelose mie cure incessanti,
Lacera, stimolata,
a questo suolo. De miei pomposi
augelli io piombo il volo,
Fatti, del mio furor compagni erranti.

Stupri novelli a sussurar intesi.
Abbandonata la celeste corte,
Ignoto qui dimora il mio consorte.
Chiuso in stranieri, ed indecenti,
ed indecenti arnesi.

Sempre, per ingannar fanciulle belle.
Novo Proteo, si cangia in forme nove.
Aspetto, aspetto un dì che questo
mio gran Giove mi conduca
le drude in sulle stelle.

Il Romeo

Vagò mendico il core
tutto il regno d'amor
dimandando pietà, chiedendo aita
nell'infelice sua povera vita.
Nè per ben salda fede
potè trovar mercede,
que di quante egli amò crudeli a torto
ch'l fuggi, ch'il tradì, ch'il volle morto.

Tornò dal suo camino
il mio cor pellegrino,
nè pictoso favor ha mai trovato
per il mendico suo misero stato.
Femminil cortesia
forzè che spenta sia,
ch'ogni ricca beltà resa tenace
non l'udì, nol mirò, lo mandò in pace.

Juno:

Harrowed and agitated by my
incessant jealous worries,
on this patch of Earth I'll make my
noble birds descend- these
wandering companions of my rage.

I hear rumors of new seductions.
Having abandoned the court
of heaven, my husband
is living here in disguise,
concealed by strange and indecent clothing.

To deceive pretty maidens, this new Proteus
always changes himself into new shapes.
I expect one day that my
great Jupiter will bring
his paramours up to me in the stars.

The Pilgrim

My heart goes begging
through the dominions of love,
asking for kindness, seeking help
in its wretched, unhappy life.
Not even for good payment with faithfulness
could it find mercy,
so perversely cruel is the one that it loves,
fleeing, betraying, wishing it dead.

My pilgrim heart returned to its home,
never having found the least favor
of kindness
in its miserable beggardly condition.
Feminine goodwill is so wearied
that no woman rich with beauty would hear
my heart or look at it,
and they sent it away in peace.

-Transl. Richard Kolb

Tutto'l di piango

Tutto'l dì piango, e poi la notte,
quando Prendon riposo I miseri mortali,
Trovo m'in pianto
E raddoppiarsi i mali;
Così spendo'l mio tempo lagrimando.

In tristo umor vo li occhi consumando
E'l cor in doglia; e son fra li animali
L'ultimo, sì che liamorosi strali
Mi tengon ad ogni or di pace in bando.

Lasso, che pur da l'uno a l'altro sole
E da l'un'ombra a l'altra
ho già il più corso
Di questa morte che si chiama vita.

Più l'altrui fallo che'l mio
mal mi duole,
Ché pietà viva e'l mio
fido soccorso
Vedem'arder nel foco e non m'aita.

Lamento d'Arianna

Lasciatemi morire
E chi volete voi che mi conforte
In così dura sorte
In così gran martire
Lasciatemi morire

O Teseo
Sì che mio ti vo'dir che
mio pur sei
benchè t'involi ahi crudo
a gli occhi miei.

Volgiti Teseo mio
O dio volgiti indietro a rimirar colei
Che lasciato haperte la Patria il regno
E in queste arene ancora
Cibo di fere dispietate crude
Lascierà l'ossa ignude

O Teseo, se tu sapessi O Dio!
Come s'affanna la povera Arianna
Forse pentito rivolge resti ancor
La prora al lito.
Ma con l'aure serene
Tu te ne vai felice

All the day I weep, and then at night,
when the wretched mortals take rest,
I find myself in tears
and redoubled are my ills;
then I spend all of my time weeping.

In a sad state I go, weeping my eyes
out, my heart in grief, and I am the
last of all beings: thus do love's
arrows keep me continually from peace.

Alas! From one day to the next
from one night to the next,
I have already run the course
of most of this death called life.

The fault of another grieves me
more than my own woe:
that pity should live and my
faithful ally
sees me burn and helps me not.

O let me die
and what can soften my comfort
in this harsh fate
this great suffering
let me die.

O my Theseus
yes, I call you mine
for you are mine
though you have vanished, cruel one
before my eyes.

Look at me, Theseus,
O God! Turn back to see she who left
her homeland and kingdom for you,
and who, on these deserted shores
food for cruel and merciless beasts
will leave her bare bones.

O Theseus, if you knew- O God!
how troubled is your poor Ariadne
perhaps repentant, you would turn
Your prow towards these shores.
But with gentle breezes,
you happily go

Et io qui piango.
A te prepara Atene
Liete pompe superbe
Ed io rimango
Cibo di fere insolitarie arene

Te l'uno e l'altro tuo vecchio
Parente stringeran lieti
Et io più non vedrovi
O madre, O padre mio.

Dove dov'è la fede
Che tanto mi giuravi?
Così ne l'alta sede
Tu mi ripond degl'Avi?
Son queste le corone
Onde m'adorn'il crine?
Questi gli scettri sono,
Queste le gemme e gl'ori?
Lasciarmi in abbandono
A fera che mi strazi e mi divori?

Ah Teseo, ah Teseo mio
Lascierai tu morire
Invan piangendo invan gidando aita
La misera Arianna
Ch'a te fidossi e ti diè gloria e vita?

Ahi che non pur rispondi
Ahi che più d'aspe sordo a miei lamenti
O nembi, o turbi, o venti sommergetelo
Voi dentr'aquell'onde correte orche
Ballene e delle membra immonde
Empietele voragini profonde

Che parlo, ahi, che vaneggio?
Misera, oimè
Che chieggio? O Teseo
Non son non son quell'io
Non son quell'io che I ferì
Detti sciolsi; parlò l'affano mio,
Parlò il dolore,
Parlò la lingua, sì
Ma non già'l core.

Misera, ancor dò loco
A la tradita speme,
E non si spigne
Fra tanto scherno ancor

And I, who weep;
for you prepare Athens
or happy festivities in splendor,
while I remain here
on these deserted shores, the prey of wild
beasts.
You shall happily clasp to your breast
both your aged parents
and I shall never see again
My mother, or my father.

Where is the faith
that you swore to me repeatedly?
Thus from your lofty throne
you praise me?
Are these the garlands
With which you would adorn my tresses?
These are the scepters I should wield,
And these the precious stones and jewels?
For me to be abandoned
Where beasts will tear apart and devour me?

Ah Theseus, thus would you leave me to
die. In vain weeping and crying out
for help, your miserable Ariadne,
Who trusted you,
Brought honor to you, and saved your life?

Ah, he still does not answer! Ah,
more deaf than an asp is he to my lament
O storms, o tempests, o winds,
drown him beneath your waves
hasten whales and monsters of the sea
and with his foul limbs, fill your deep abysses.

Ah! What do I say? Am I delirious?
Alas, how miserable I am
What to ask? O Theseus
I am not, no, I am not she
Who unleashed those fierce words
Speaks the distress of me,
And my pain;
Yes, my tongue did speak,
But not my heart.

Miserable! Yet do I hope
In spite of betrayal, and not even
Such great derision
Puts out love's fire

d'amore Il foco
 spegni tu morte omai
 le fiamme indegne
 O Madre, O Padre
 O de l'antico Regno superbi alberghi,
 Ov'ebbi or la cuna.
 O servi, o fidi amici
 (ahi fato indegno)
 mirate, ove m'hascort'empia fortuna,
 mirate di che duol m'ha fatto herede
 l'amor mio, la mia fede,
 e l'altrui inganno,
 Così va chi tropp'ama
 E troppo crede.

Sonet vox tua

Sonet vox tua in auribus cordis mei,
 amabilissime Jesu,
 et abundantia plenitudinis gratiae tuae
 superet abundantiam peccatorum meorum.
 Tunc enim cantabo,
 exultabo, jubilabo,
 et psalmum dicam
 jubilationis et laetitiae.
 Et erit vox mea quasi
 cithare citharizantium.
 Et eloquium meum dulce
 super mel et favum.

Laudate Dominum (Psalm 150)

Laudate dominum in sanctis ejus.
 Laudate eum in firmamento virtutis ejus.
 Laudate eum in sono tubae.
 Laudate eum in psalterio et citara.
 Laudate eum in tympano et choro.
 Laudate eum in cimbali bene sonantibus,
 Laudate eum in cimbali jubilationibus.
 Omnis spiritus laudet dominum.
 Alleluia.

Evening Hymn

Now, now that the sun hath veil'd his light, and bid the world goodnight,
 to the soft bed my body I dispose; But where, where shall my soul repose?
 Dear, dear God, even in thy arms, ev'n in thy arms:
 And can there be any so sweet security? Then to thy rest, O my soul!
 And singing, praise the mercy that prolongs thy days. Hallelujah.

Now you, Death, you shall
 Extinguish my wronged ardour.
 O Mother, O Father, O splendid
 Palace of that ancient kingdom
 Where my cradle was gold.
 O servants, trusted friends
 (Ah! Cruel fate!)
 Look, where pitiless fate
 has led me! Observe
 the pain inflicted by my love
 my faith, and the deceit of others.
 thus is the destiny
 of one who loves too much
 and trusts too deeply.

Let your voice sound in the ears of my heart,
 most beloved Jesus,
 and may the abundance of your grace
 overcome the abundance of my sins.
 Then truly I will sing,
 I will exult, I will rejoice,
 I will recite a psalm
 of jubilation and rejoicing.
 And my voice will be like
 the striking of the kithara.
 And my speech sweeter
 than honey and the honeycomb.

Praise the Lord in His sanctuary.
 Praise Him in the firmament of his power.
 Praise Him with the sound of the trumpet.
 Praise Him with the psaltery and harp.
 Praise Him with the drum and dancing.
 Praise Him with sweet-sounding cymbals.
 Praise Him with the jubilant cymbals.
 Let all that hath breath praise the Lord.
 Alleluia.

About the Performers

Dava Sobel, a former New York Times science reporter, is the author of *Longitude*, *Galileo's Daughter*, and *The Planets*. In her thirty years as a science journalist she has written for many magazines, including *Discover* and *The New Yorker*, served as a contributing editor to *Harvard Magazine* and *Omni*, and co-authored five books, including *Is Anyone Out There?* with astronomer Frank Drake. She received the 2001 Individual Public Service Award from the National Science Board, the 2001 Bradford Washburn Award from the Boston Museum of Science, and the 2004 Harrison Medal from the Worshipful Company of Clockmakers, London. In 2008 the Astronomical Society of the Pacific gave her its Klumpke-Roberts Award for "increasing the public understanding and appreciation of astronomy." She is a lifetime member of the International Dark Sky Association and a volunteer Solar System Ambassador for NASA.

Her current project is a stage play about sixteenth-century astronomer Nicolaus Copernicus, *And the Sun Stood Still*. The play was commissioned by Manhattan Theatre Club through the Alfred P. Sloan Initiative and supported by a Fellowship from the John Simon Guggenheim Memorial Foundation.

Longitude, recently reissued in a special tenth-anniversary edition with a foreword by astronaut Neil Armstrong, won several literary prizes, including the Harold D. Vursell Memorial Award from the American Academy of Arts and Letters. *Galileo's Daughter* is based on 124 surviving letters to Galileo from his eldest child, which Ms. Sobel translated from the original Italian. *Galileo's Daughter* won the 1999 Los Angeles Times Book Prize for science and technology, a 2000 Christopher Award, and was a finalist for the 2000 Pulitzer Prize in biography. The paperback edition enjoyed five consecutive weeks as the #1 New York Times nonfiction bestseller.

As a result of her latest book, *The Planets*, asteroid "30935 Davasobel" was named in her honor.

Sarah Pillow has built a unique career by drawing on her equal expertise in jazz, classical, and early music repertoire. Her current performance season is a testament to her flexibility and innovation as a singer. In addition to her work with Perpetual Motion, Sarah recently returned from Mumbai and appearances with the Symphony Orchestra of India; was hailed as "splendid" by Anthony Tommasini of *The New York Times* for her portrayal of The Queen in the *Play of Daniel*, a 12th-Century musi-

cal play; and can be heard on Sony BMG's upcoming release of Rodgers & Hammerstein's *Allegro*.

Sarah's New York City performance credits include several avant-garde projects at The Kitchen and Knitting Factory, *The Marian Vespers of 1610* with The New York Collegium, and *Sweeney Todd* at Lincoln Center with the New York Philharmonic. Sarah has toured over 30 cities in the United States with both her jazz quartet and her crossover project, Nuove Musiche. Her work in Baroque music is extensive, with performances and recordings for the BBC and ASV Records of composer Giovanni Felice Sances, a contemporary of Monteverdi. Galileo's Daughters, her Baroque music ensemble, combines operatic drama, musical scholarship, and Sarah's professional jazz background to bring freshness and immediacy to the performance of early Baroque repertoire.

Sarah is co-founder with her husband Marc Wagon of Buckyball Music, Inc., a record label and music production company that strives to forge a stronger relationship between science and the arts. Sarah holds a bachelor's degree from Oberlin Conservatory, teaches voice privately and volunteers as director of the Youth Chorus at The Mercy Center in The Bronx.

Mary Anne Ballard, viola da gamba, is a founding member of Galileo's Daughters, and also performs and tours with the Baltimore Consort and Brio. With these ensembles, as well as the Oberlin Consort of Viols, she has made about twenty recordings on the Gasparo, Classic Masters, and Dorian labels of early and traditional repertory 1500-1700. She also performs Baroque music either with chamber ensembles or in recital, and has appeared with the Smithsonian Chamber Players, the Bethlehem Bach Festival, the Bach Festival of Philadelphia, the Philadelphia Classical Symphony, the Baroque Soloists of New Jersey, Piccolo Spoleto, Pomerium Musices, et al. In her earlier career, she was a member of The New World Consort, a group which toured the US with productions of medieval music and drama, including *Le Jeu de Robin et Marion*. This season, Ms. Ballard was the Music Director of the critically acclaimed 50th-Anniversary commemorative production of the *Play of Daniel* at The Cloisters.

Active in teaching and directing early music, Ms. Ballard founded the University of Pennsylvania Collegium Musicum, an ensemble, which for fourteen years explored the music of the Middle Ages and Renaissance, including the several medieval music-dramas, which she edited and produced. She also directed Music Alta of Princeton University,

and from 1981-89 taught viola da gamba and Baroque chamber music at the Peabody Conservatory in Baltimore. During summers, she teaches at the Oberlin Baroque Performance Institute. Ms. Ballard is a graduate of Wellesley College and holds an M.A. in Musicology from the University of Pennsylvania. Her viola da gamba studies were chiefly with August Wenzinger and Catharina Meints. She divides her time between New York City and South Bend, Indiana where her husband, Alexander Blachly teaches and conducts at the University of Notre Dame.

One of the most outstanding lutenists performing today, **Ronn McFarlane** is working to bring the transcendent charm and timeless quality of the lute into the musical mainstream and make it accessible to a wider audience.

Born in West Virginia, Mr. McFarlane spent his early years in the neighboring state of Maryland. At thirteen, he fell hopelessly in love with music and taught himself to play on a “cranky sixteen-dollar steel-string guitar.” Ronn evolved, teaching himself blues and rock music on the electric guitar while studying classical guitar. He graduated with honors from Shenandoah Conservatory and continued guitar studies at Peabody Conservatory before dropping out, turning his full attention and energy to the lute in 1978. The following year, Mr. McFarlane began to perform solo recitals on the lute and became a member of the Baltimore Consort. Since that time, he has toured extensively throughout the United States, Canada and Europe with the Baltimore Consort and as a soloist.

McFarlane was a faculty member of the Peabody Conservatory from 1984 to 1995, teaching lute and lute-related subjects. In 1996, Mr. McFarlane was awarded an honorary Doctorate from Shenandoah Conservatory for his achievements in bringing the lute and its music to the world. He has over 25 recordings on the Dorian label, including for solo lute recordings, lute song recordings, CDs with the Baltimore Consort and ballad recordings with Custer LaRue and members of the Baltimore Consort.

Recently, Ronn McFarlane has been engaged in composing new music for the lute, building on the tradition of the lutenist/composers of past centuries. This new music is the focus of his new solo CD, *Indigo Road*. *Indigo Road* has been nominated for a Grammy Award in the category of Best Classical Crossover Album for 2009.

The images of space are used with the courtesy of the following entities:
Jet Propulsion Laboratory; Hubble Heritage Project;
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NASA and their space probes Galileo, Voyager, Clementine, Messenger and Cassini;
and the European Space Agency Mars Express.

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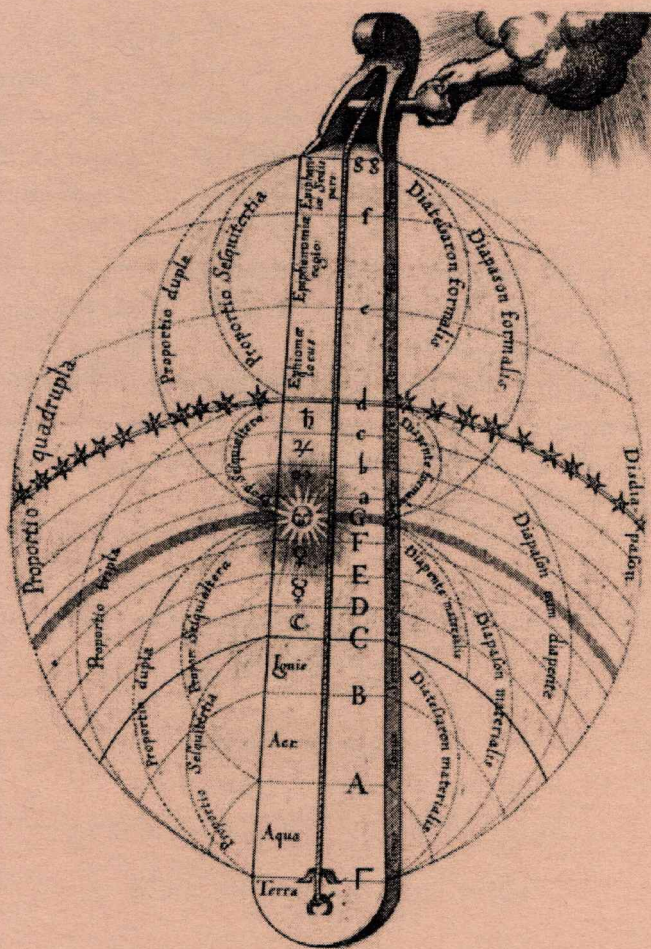
Dava Sobel *Galileo's Daughter, a Historical Memoir of Science, Faith, and Love* (Walker Publishing Co., 1999; Penguin Books 2000) and *The Planets* (Viking Penguin 2005)

James Gleick *Isaac Newton* (Pantheon 2003)

Robert L. Kendrick *Celestial Sirens: Nuns and their Music in early Modern Milan* (Oxford U. Press, 1996)

Craig A. Monson *Disembodied Voices: Music and Culture in an Early Modern Italian Convent* (U. of California Press, 1995)

For more information, please visit
www.galileosdaughters.com or www.buckyballmusic.com



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