# Main Line Symphony Orchestra Don Liuzzi, Music Director Susan Nowicki, Choir Master

From 13.82
Billion
Years Ago
Until Today
and into
the Future

# Emergent Universe Oratorio

Composed by Sam Guarnaccia

Saturday, July 28, 2018 7:30 p.m.

St. Thomas of Villanova Church

Sponsored by the
Big History Project, Thomas Berry Foundation,
President of Villanova University,
College of Liberal Arts and Sciences,
Graduate Liberal Arts and Sciences,
Associate Vice Provost for Research, University Honors Program,
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Political Science, Theatre and Studio Art; Ethics Program, Augustine and
Culture Seminar Program; Campus Minister for Liturgical Music, Graduate
Liberal Studies Program, Matthew J. Ryan Center, Villanova Center for
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# The Emergent Universe Oratorio

A very warm welcome to you from the **International Big History Association** to this featured part of the 2018 IBHA conference here at Villanova University. The *Emergent Universe Oratorio* creatively integrates science with beauty from superb musical direction, choral singers, and orchestral players. The oratorio is performed by the Main Line Symphony Orchestra (MLSO), now in its 72nd season. The MLSO is directed by Don Liuzzi, who is also a member of the Philadelphia Orchestra.

The Oratorio, by Vermont composer Sam Guarnaccia, gives expression to the awe inspiring narrative of the universe from the big bang to the emergence of humanity's global and universal consciousness. It is a series of alternating intensively scored recitatives with major lyrical choral sections.

The oratorio is being introduced by Ursula Goodenough, Professor Emerita of Biology at Washington University in St. Louis where she has engaged in research on eukaryotic algae. She authored the best-selling book, *Sacred Depths of Nature*, participated in a *Mind and Life* dialogue with the Dalai Lama in 2002, has participated in television productions on PBS and The History Channel, and contributed to the NPR blog, *13.7: Cosmos & Culture*, from 2009 to 2011. Goodenough was instrumental in the writing of the libretto for the oratorio.

Emergence describes the appearance of new properties in the new levels of complexity that have developed over time. The sciences have provided us evidence of a beginning of our universe 13.82 billion years ago. Almost immediately, quarks formed relationships that produced protons and neutrons. Since then, there has been a process of relationships within ever more complex relationships from protons to atoms, stars, galaxies, chemicals, our solar system, our Earth, tectonic plates, changing oceans and continents, amino acids, proteins, cells, multicellular life forms, a stunning variety of plants and animals in the sea and on land, and – some 200,000 years ago – humans. Our human nature emerged from a very long past in which at first there had not been any of those relationships and things mentioned above. But atoms, cells, and much more did develop and eventually came together in us.

Among the relationships within us were the 100 trillion synapses between the 100 billion neurons within each of our brains. Our brains are the most complex relationships of matter in the universe of which we are aware. We are that part of the known universe that is able to reflect on itself. The electric and chemical exchanges between our neurons enable our self-consciousness, language, symbolic thinking, memory, imagination, wonder, inter-personal relationships, and creativity.

Could it be said that the self-conscious creativity of humans is an outgrowth of a very long prior history of emergent complexity? Our strength came not from talons, fangs, wings, or shells. Our greatest abilities came from the ability to relate to each other in ever more sophisticated forms. Our ancestors could imagine, plan for, and create ever more complex relationships within kinship groups, villages, cities, nations, empires, and global systems. We interacted with the environment from which we emerged and have increasingly affected it. We imagined and created tools, agriculture, stories, sculpture, symphonies, industry, computers, and other cultural achievements. Among these are our great religious traditions, which seek dialogue between the ancient and the new. This performance, held in the beautiful church on the campus of Villanova University, is part of that dialogue. The theme of the oratorio is in support of the objectives of Laudato Si', Pope Francis' vision of a unified humanity empowered by a new consciousness and responsibility to our 'Earth home.'

We do this well aware that we humans have also imagined and created weapons and wars. We have often despoiled the nature from which we had emerged and which is necessary for our sustenance.

Who among us will be creative enough to imagine and produce sustainable relationships among ourselves and with our environment? Who will help create the beauty in our communities that can draw from the beauty we see in shells, mountains, and galactic nebulae? Who will help create the beauty about which we can say at the end of our day, "it is good"?

Please turn all electronic devices to the off position during the concert. Out of respect for the performers and other audience members, please refrain from texting or other use of devices during the concert. Unauthorized recordings of any kind are not allowed due to copyright issues. Thank you!

Now in its 72nd season, the Main Line Symphony Orchestra (MLSO) was founded on the principles of cultural preservation, educational outreach, and democratic organization that have made community musical ensembles a rich part of the American experience. Based in the Philadelphia western suburb of Wayne, Pennsylvania, the orchestra draws dedicated musicians of all ages who seek the challenge of performing both standard orchestral literature and new compositions. Each year, members have the pleasure of accompanying professional soloists under the guidance of Music Director Don Liuzzi and Concertmaster Jason DePue.

For many decades the MLSO has enjoyed a close relationship with members of the Philadelphia Orchestra as well as local college and conservatory faculty. Liuzzi is Principal Timpanist in that orchestra, and DePue is a member of its first violin section. Predecessors to Liuzzi and Roby were Philadelphia Orchestra bassist Henry Scott and violinist Yumi Scott, who generously served in the same capacities for twenty-seven years, setting the standard for an exceptional orchestra committed to recruiting, welcoming, and mentoring players; serving the cultural needs of the community; and providing warm and engaging musical encounters for audiences from all walks of life.

**Don Liuzzi** was born and raised in Weymouth, Massachusetts, and completed high school in Philadelphia at the Franklin Learning Center. He earned his Bachelor of Music degree from the University of Michigan and his Master of Music degree from Temple University. His primary teachers were Alan Abel, Charles Owen, and John Soroka.

Before joining The Philadelphia Orchestra in 1989, Mr. Liuzzi was a member of the Pittsburgh Symphony percussion section from 1982 to 1989. While in Pittsburgh he taught percussion and conducted the percussion ensemble at Duquesne University, was assistant conductor of the Three Rivers Young Peoples Orchestra, and appeared on PBS' nationally syndicated Mr. Roger's Neighborhood, performing marimba and percussion solos.

Beyond his over 60 commercial recordings as principal timpani of The Philadelphia Orchestra, Mr. Liuzzi can be heard on several Decca releases with Seiji Ozawa's Saito Kinen Festival Orchestra, with which he has been a guest timpanist for five seasons. As a former percussionist with the Network for New Music, and also for area composers, he has recorded contemporary chamber works for the CRI, Crystal, and Albany labels. His percussion solo and chamber CD release from 2012, Movement in Time (Equilibrium), is volume I of the Philadelphia Percussion Project. This first volume features music by Maurice Wright, Maurice

Rissman, and William Kraft. Volume II, Zones, was released in May 2015 and is a Philadelphia Orchestra percussion group (POPG) recording featuring Jennifer Higdon's Zones, as well as six other world premiere recordings including his own composition, Seoul Spirit. A participating musician in the documentary film Music from the Inside Out (2005), Mr. Liuzzi also served as the film's coordinating producer and was integral in helping develop the accompanying middle school teaching curriculum published by Alfred Books. The feature length film by Anker Productions, which features The Philadelphia Orchestra, was re-released digitally on iTunes in June 2013 and is also available on Netflix. Mr. Liuzzi's other electronic media activity (under his company name of Beat the Drum Entertainment, Inc.) has included two other CD projects with the DePue Brothers Band: performing drums and singing, and executive producing Weapons of Grass Construction and their latest album, When It's Christmas Time, released in December 2013.

Mr. Liuzzi has given master classes at most major music schools throughout the United States and in Canada, Mexico, Argentina, Spain, Korea, Japan, and China. He has been a percussion and timpani coach at the National Orchestral Institute, the New World Symphony, the Pacific Music Festival, the Canton International Summer Music Academy, the Lindenbaum Music Festival (in Korea), the Youth Orchestra of the Americas, and the National Youth Orchestra USA run by Carnegie Hall. He joined the faculty of the Curtis Institute of Music in January 1994. He has also held faculty positions at Rowan University and guest faculty status at Indiana University of Pennsylvania and the Manhattan School of Music. Mr. Liuzzi just completed 10 years as music director of the Philadelphia All City High School Orchestra, and is founding conductor of the Curtis Institute's 20-21 New Music Ensemble.

Mr. Liuzzi's early orchestral experience included the Flint Symphony, the Michigan Opera Theater Orchestra, and the Colorado Philharmonic. He has also played in the Spoleto Festival Orchestra for three seasons and was a Tanglewood Fellow in 1980. In July 1996 he made his solo debut with The Philadelphia Orchestra at the Mann Center for the Performing Arts, and his subscription solo debut in January 1998. Having consulted with Yamaha for over 15 years on the development of professional timpani, he is now a Yamaha performing artist, with a highly-regarded YouTube solo appearance and interview through his Yamaha affiliation. He is married with two adult daughters.





Sam Guarnaccia is a composer, performer, scholar, and founder/director of Sam Guarnaccia Music (SGM) www. samguarnaccia.com. A classical guitarist, he studied privately, at the Royal Conservatory of Madrid, the North Carolina School of the Arts, and received

a Master of Fine Arts from the California Institute of the Arts. He created, and for ten years taught and directed the guitar program of the University of Denver's renowned Lamont School of Music. He has also taught and instituted programs at Middlebury College and the University of Vermont, as Spanish scholar, performer, and composer. His cycle of nine

peace songs has been incorporated into a children's peace education curriculum. His work, A Celtic Mass for Peace, Songs for the Earth, a collaboration with Celtic Spirituality scholar, writer, and teacher, John Philip Newell, has been performed all over the United States, Iona and Edinburgh, Scotland, and was featured in a major Peace celebration on the 10th anniversary of 9/11 on September 11, 2011, in New York and in Vermont. His most recent major work, the Emergent Universe Oratorio, was originally inspired by the film, "Journey of the Universe" and the work of Brian Swimme, Mary Evelyn Tucker, John Grim and Thomas Berry. He works closely with creative partner Paula Guarnaccia.



Orator Tim Guiles, an accomplished pianist, has collaborated with composer Sam Guarnaccia to write the piano score for both the Emergent Universe Oratorio and the Celtic Mass for Peace. Also an ardent environmentalist and peace advocate, Tim has a lifetime of experience implementing environmental initiatives. In addition to his experience in musical theater, his engineering and software design background have enabled him to develop many innovative ideas and approaches for living more sustainably. For over twenty years he lived in and built tiny houses in rural Vermont. He now lives in Brandon, Vermont where he is developing a pilot project for a Basic Universal Income for the town.



Cameron Davis is a Senior Lecturer, and Environmental Humanities Fellow at the University of Vermont where she teaches Painting, Drawing, Perspectives on Making, and courses exploring the intersection of Art, Perception & Ecology. Davis has attended artist residencies at the Vermont Studio Center and Banff

Centre for the Arts, Alberta, Canada, and has exhibited throughout Vermont, New York, and San Diego. Her work is in private and public collections nationally. She is the recipient of the Lee Krasner-Jackson Pollock Foundation grant for painting, and Argosy Foundation and Puffin Foundation grants for painting in collaboration

with composer Sam Guarnaccia. Davis is a member of the international ecoartnetwork.org. The painting series, Endless Spring, was created during a three-year collaboration with composer Sam Guarnaccia for the *Emergent Universe Oratorio*. Twelve large paintings illustrate the Oratorio's sections. Be sure to visit her exhibition after the oratorio. Davis' work includes paintings, installations and community art projects informed by the exploration of human-nature relationships and ecological thought. https://camerondavisstudio.com/Her work is on display at in the Villanova Room of the Connelly Center (where the post-concert reception will be) during the current IBHA conference.

## **Main Line Symphony Orchestra**

Don Liuzzi, Music Director Susan Nowicki, Choir Master

**Violins** 

Michael Antioquia Sean Bennett

Carol Chou, Principal Ellie Devyatkin Irene Guerriero Cheryl P. Hagans Jackie Janusz, Principal

Julie Miller
Cyndi Noonan
Alice Pavri
Grace Pehlert
Byron Pondexter
Samir Robinson

Viola

Linda Jeffers, Principal Kyran Littlejohn Terry Muhlenberg Kristin Taylor Jennifer Grace Voiner Cello

Katie Contino, Principal Elizabeth Corbin Hugh McDonald Arthur Royce

**Double Bass** 

Clif Anderson, Principal

Cindy Ford Linda Trebing

Flute

Diane Kay-Clark Becki Simon, Principal

Oboe

Ernest Baker, Principal

Anna Jensky

**Clarinet and Bass Clarinet** 

Beth Vilsmeier, Principal

Bassoon

Jenna Addis

Vanessa Taylor, Principal

French Horn

Rachel Braddick, Principal

Jane Murray

**Trumpet** 

Neal Kindig

L Curry Moyer, Principal

**Trombone** 

Jim Gicking Frank Rein

Timpani

Denis Tate, Principal

Percussion

Greg Grimshaw

Harp

Joanna Shaw Russ

**Soloists** 

Raegan Ruiz

Soprano Elizabeth Hohwieler Alto Annalise Dzwonczyk

**Tenor** Fernando Mancillas

BassRichard ZuckNarratorTim GuilesNarratorAly Brisbois

Choir

Soprano

Soprano

Bethany Barry (from Vermont)
Janice Bryson (from PA)
Camille D. Burge (PA)
Diana Carmona (VT)
Jennifer Carpenter (VT)
Marjorie L. Carsen (VT)
Kristin Conrad (Bandwyine)

Kristin Conrad (Bandywine Singers, BWS) Bethann Dilione (BWS) Patricia Exley (PA) Elizabeth Hohwieler (PA) Adrienne Kerbel (PA) Lisa Landley (PA) Hannah Logan (VT) Christine Murphy (VT) Raegan Ruiz (PA)

Sansea Sparling (VT)

Alto

Renee Cantwell (PA)
Dorothy Cardella (PA)
Annalise Dzwonczyk (PA)
Deborah Felmeth (VT)
Lara Kennedy (BWS)
Candis Perrault (VT)
Regina Pfohl (BWS)
Paula Rivera (PA)
Maryanne Roberts (VT)
Debbie Webster (PA)

Tenor

Rich Carpenter (VT) Mario DeLano (BWS) Wendy Goodwin (VT) Robert Hand (PA) Robert Landley (PA) Jim Longacre (PA)

Fernando Mancillas (PA)
Don Leroy Morales (PA)
Connor Riley (BWS)
D.J. Tetreault (VT)
Steve Williamson (PA)
Gerry Zickler (VT)

**Bass** 

Russ Buckley (BWS) Greg Cantwell (PA) Mark Kuprych (VT) Derek Larsen (VT) Brian Phipps (PA) Rich Reed (VT)

Michael Spaziani (BWS)

Richard Zuck (PA)

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## **Program**

#### Welcome

Lowell Gustafson, President, International Big History Association Professor of Political Science, Villanova University

#### **Introduction of the Emergent Universe Oratorio**

Ursula Goodenough, Professor Emerita of Biology, Washington University, St. Louis Author of Sacred Depths of Nature

#### **Performance of the Emergent Universe Oratorio**

- 1 The Great Flaring Forth (Orator)
- 2 Gravity's Law (Chorus)
- 3 Galaxies Forming-Emanating Brilliance (Orator)
- 4 EarthRise Amen (Soloists and Chorus)
- 5 Life's Emergence (Orator)
- 6 God's Grandeur (Soloists and Chorus)
- 7 The Passion of Animals (Orator)
- 8 The Cascade Lament (Readers Solo Viola)
- 9 Turning (Orchestra)
- 10 Emergence of Human Planetary Presence (Orator)
- 11 The Peace of Wild Things (Chorus)
- 12 Time's Topography (Orator)
- 13 Morningside Cathedral (Aria for SATB Soloists)
- 14 Emerging Earth Community
- 15 Awakening (Chorus)
- 16 Transformation (Orator)
- 17 To See a World (Soloists and Chorus)

Please join us in the Villanova Room in the Connelly Center, just five minutes walk from the church, after the performance of the oratorio to meet the composer, symphony and choir directors, and musicians.

We are grateful to Fr. Joseph A. Genito, O.S.A. and St. Thomas of Villanova Parish for the use of the beautiful church tonight.

## The Great Flaring Forth

In the great silence—before space or time—
A trembling — a singularity of infinite potential—
The first stirring of our shimmering Universe.

In that fertile darkness grew An unimaginable attraction — An unbounded possibility —

That the Universe would burst into brilliance, Flaring forth with inconceivable power.

Impelled by cosmic fire —

An ecstasy of elementary particles and light —

In a micro-instant
The fireball would inflate — Expanding space
As gravity waves shaped the contours
Of the emerging cosmos.

So would begin a journey into magnificence, The blossoming of our universe, A single, multi-form energy event, Ever evolving in beauty and complexity.

Enfolded in the chaos of primordial particles would be The impulse of matter to bond, Igniting the promise Of atoms and galaxies, Suns and planets, oceans, rivers, Trees, butterflies, and songs of love.

In the great silence—
The Universe poised — in exquisite — anticipation — Gathering —
Awaiting the first breath —

Energy —
Space — Time — Mass — Light —
The Great Radiance unfurled —
The story of a living Universe
Bringing forth all that we know,
Birthing all that we are and ever shall be.

Asking of us now —
How shall we move into this Mystery?
How may we know and live this story?
How shall we know and love this Earth?
Peter Adair, with Caitlin Adair,
Sam and Paula Guarnaccia

### **Gravity's Law**

How surely gravity's law, Strong as an ocean current, Takes hold of even the smallest thing And pulls it toward the heart of the world.

Each thing —
Each stone, blossom, child —
Is held in place.
Only we, in our arrogance,
Push out beyond what we each belong to
For some empty freedom.

If we surrendered To earth's intelligence We could rise up rooted, like trees.

Instead we entangle ourselves In knots of our own making. And struggle, lonely and confused.

So, like children, we begin again To learn from the things, Because they are in God's heart; They have never left him.

This is what the things can teach us: To fall, patiently to trust our heaviness. Even a bird has to do that Before it can fly.

Rainer Maria Rilke Translated by Joanna Macy and Anita Barrows

## Emanating Brilliance of Stars

"How are we to understand the beauty of the Universe? What gave birth to all this beauty?"
What is the mystery —
the 'primordial vibrations' — -1
the music at the heart of the Universe? — SG

More than one trillion galaxies paint the heavens—
Majestic Islands in an expanding ocean of dark energy—
Held together in the fierce embrace of dark matter—
Each with countless stars —
Echoes of the Great Flaring Forth.

Spiraling galaxies like our Milky Way are wombs of creativity,
For along their dancing bejeweled arms

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Density waves pulse, hydrogen clouds contract, And new stars continually burst into brilliance.

Like humans, stars are born, flourish, age and die.
In their dying, large stars collapse inward—
Then explode as breathtaking supernovas
Spewing newly created heavy elements into the vastness of space.

The very atoms composing our bodies— Carbon, oxygen, magnesium, iron— Woven through every leaf, feather, eye or hand— Are born in the spectacular explosions of perishing stars.

In one great galactic arm,
An immense fragment of molecular cloud collapsed—
Its gas and cosmic dust grains
Flattening into a disc—
The center flaring into our Sun.

Poised on the 'knife edge' between implosion and explosion,

The sun drew these precious grains of dust Into 'the silence of the gravitational embrace'. -2

Gradually coalescing into a necklace of unique planets: Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune—And Earth, the bountiful Bearer of Life.

For countless millennia
Humans have looked with awe into the night sky,
Transfixed by the majestic beauty of the heavens,
Finding nourishment, meaning, guidance.
Our world—imaged forth in the wonders of the sun and clouds by day—
The stars and planets by night. -3

Now we know—
We are children of the Great Flaring Forth—
Stars are our ancestors—
And we—descendants of their radiant and creative Being.

Peter Adair, with Caitlin Adair,
Sam Guarnaccia, Paula Guarnaccia

#### EarthRise AMEN

In the beginning Was the dream, EarthRise Amen Thomas Berry Life's Emergence
Across the broad field of space—
The planets—suspended on the
Outstretched arms of our spiral galaxy.

One planet – a fertile mix of Churning oceans, roiling magma, And charged atmosphere—
Breathes into being Single-celled organisms to become a *Living Earth*.

Over three billion years ago
The first fragile membrane formed
Separating the cell from its surroundings,
Becoming the first locus of perception, choice, sensation—
Determining what was nourishing, what was safe,
What was to remain.

Within its DNA, life remembered, encoding Successes, rejecting failures—
Evolving patterns of adaptation and reproduction—

Intertwining spirals of memory mirrored in the unfolding fern,

The spider web, the Nautilus, the snail—A patient, probing, innovative wisdom, A single expanding responsiveness.

As these primeval cells
Spread throughout the Earth—
Some turned toward the Sun,
Their source of warmth and light,
Inaugurating the miracle of photosynthesis—
Sunlight becoming food for the planet.

Preparing the way for algae, fungi, mosses,
Slime molds, sporophytes, the slithering fishes,
Frogs, turtles, lizards,
Every species of bird
Stretching their bright wings across the sky—
And the skinny shrew,
Small, warm blooded, among
The first of the beautiful mammals.

From the astounding creativity of the great super-kingdoms Archaea and Bacteria, Cells engulfed and merged with each other, Bringing forth Eukarya—a new form of lifePowered by oxygen,
Inventing the protective nucleus—
Co-evolving within a single cell of staggering complexity.

Through LIFE—

Earth awakened to itself and the Universe.

Emerging—'through a glorious sequence of transformations,'-1

From the Flaring Forth—to galaxies—to stars—to Living Earth,

Infinitely interdependent—because...

"Nothing is itself without everything else". -2

Peter Adair, with Caitlin Adair, Sam Guarnaccia

#### God's Grandeur

The world is charged with the grandeur of God. It will flame out, like shining from shook foil; It gathers to a greatness, like the ooze of oil Crushed. Why do men then now not reck his rod? Generations have trod, have trod, have trod; And all is seared with trade, bleared, smeared with toil; And wears men's smudge and shares men's smell: the soil Is bare now, nor can foot feel, being shod.

And for all this, nature is never spent;
There lives the dearest freshness deep down things;
And though the last lights off the black West went
Oh, morning, at the brown brink eastward, springs —
Because the Holy Ghost over the bent
World broods with warm breast and ah! bright wings.

Gerard Manley Hopkins

#### The Passion of Animals

Ravens in flight release twigs, then swoop down gracefully to catch them again. Porcupines dance on their hind legs, swaying rhythmically from side to side. Coyote cubs tussle and tumble by day, and after nightfall Sing with their elders to the glory of the moon.

Six hundred million years ago, animals emerged from *this* single-celled life. With unique powers of movement, they colonized new territories, bringing forth a kaleidoscope of creatures—Pervading Air, Land and Sea with sensual, emotional and instinctual life.

Animals sensitize the planet,

Bringing forth symphonies of sound and smell, taste and touch:

Bees and wasps see ultraviolet light patterns leading them to pollen and nectar.
Bats navigate the dark with echoing sound waves.
Dogs sniff a landscape of odors,
while tiny spring peepers join returning birds,
filling the springtime world with vibrant song.

Through the passion of animals,
Life unleashes an explosion of consciousness and
sensitivity—

By constantly signaling and sensing each other—
From the flash patterns of fireflies at night
to the rescue of humans at sea by dolphins—
their perception creates intricate webs of
interconnectedness,
predation, and caring.

Red-crowned cranes leap and float in a balletic mating dance.

Crows slide playfully down snowy inclines on makeshift sleds of their own invention.

Elephants become delirious with excitement at the birth of a calf.

Young mammals revel in the pure joy of exuberant play, rapturous pleasure evoking inventive behavior,-1 flexibility, and the stretching of boundaries.

Their play is practice for the high stakes of life and death In the protected grace of parental care.

'The ancient powers of their emotions'—
'sculpted by the realities of survival'. -1

One day, Nature would produce a mammal with a prolonged period of youthful curiosity and exploration —
A being with a passion for learning, creativity, and wonder.

Peter Adair, with Caitlin Adair, Sam Guarnaccia

## The Cascade: Dialogue

Paula Guarnaccia and Amy Seidel

## Lament

Viola solo

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## **Turning**

Orchestral Interlude

## **Planetary Presence**

From primates our ancestors emerged a new breed, Curious and playful, a dream-making animal Spontaneous, astonished, compelled to try everything!

Language sputtered and sung into being — Through language, each human Carried an entire universe within, Saturated with dreams and laughter And blazing with imagination.

Every place we went, we became that place, As the Spirit of seashore, forest, tundra Captivated our imagining.

Diverse human cultures met and mixed and mingled From wandering tribes into settled communities Taming, inventing, expressing, exploring.

Earth became permeated with human presence. Consciousness gave birth to symbols, Which then magnified consciousness.

Language and symbol
Set fire to human possibility.
With writing, art, music, technology,
Life's creativity burst beyond biological coding.
Human culture became a new DNA outside the body,
Changing the face of Earth
And the dynamic of evolution.

With human emergence, the universe created a space Where depths of feeling are concentrated, Where wonder is birthed, Where an ocean of experience and understanding Gave rise to a planetary species.

We belong here.

We are a planet-altering species, a juvenile species Playing havoc with the air, the climate, the rivers, the oceans.

We live on a different planet now, A planet where the human Profoundly affects the course of evolution.

Yet we belong here.

This dream-making animal —
Riding a wave of conscious evolution
We awakened
To find ourselves here
Telling the story of the universe, a story that is also telling us.

Peter Adair, with Caitlin Adair

## The Peace of Wild Things

When despair for the world grows in me
And I wake in the night at the least sound
In fear of what my life and my children's lives may be,
I go and lie down where the wood drake
Rests in his beauty on the water, and the great heron feeds.
I come into the peace of wild things
Who do not tax their lives with forethought
Of grief. I come into the presence of still water.
And I feel above me the day-blind stars
Waiting with their light. For a time
I rest in the grace of the world, and am free.

Wendell Berry

### Time's Topography

Streams wind down from the heights, Converging like branches of a tree.

John Muir, from his Sierra ridge, Could see Yosemite's lakes

As apples on those rippling boughs. Merced, sweet River of Mercy,

Broadening through the valley, was the trunk.

Here in the thickening woods Of clear-cut and recovering Vermont

We see our watersheds as maples, Fluctuating in the muddy spring.

On freezing nights twigs suck Sap up to see them through

And barred owls call their mates Across the starry dark.

Come sun-warmed morning, sap Slides down the river of this trunk.

Matter expends itself in the limbs of life,

Surges back into the pulsing core.

Persuaded by time's loving heat, Even rocks keep metamorphosing "into monarch butterflies, Blue herons and the exalted music of Mozart." (1) Like wolves, larger and grayer every year, coyotes down from Canada imprint the empty snow of March while lifting their own wild songs into the clamor of those amorous owls.

Time wells and eddies, spiraling outward And inward in this tidal forest of a world,

Bringing sweetness to our mouths, Strength to our bones, Then homecoming and release. Our separate lives find confluence here.

John Elder

## **Morningside Cathedral**

Whale song from the deep of the sea. Wolf cry from the forest.

Heartbeat of a planet.

This cry
Our Revelation
As the sun
Sinks lower
In the sky
Over a wounded
World.

And the healing
Of the wound
Is there in
A single cry
A throat opened wide
For the wild
Sacred sound...
Hovering over
The darkening earth,

Beseeching humankind To bring back the Sun, To let the flowers
Bloom in the meadows
The rivers run
Through the hills
And to let
The Earth and all
Her living creatures
Live their wild fierce
Serene and abundant life.

Thomas Berry

## **Emerging Earth Community**

This is our moment—

"The Universe is holding its breath Waiting for us to take our place." (1)

Revolutionary discoveries have led us to an astounding breadth of knowledge—a phenomenal awareness—Calling us to responsibility
Reaffirming what we already knew...
What we do to Earth, we do to ourselves!

Perhaps our destiny is
To journey into the depths of things —
To drink so deeply of the powers
Of this living universe, (2)
That we recognize
The profound dimensions of
Our radical mutuality—

And learn the languages of mountains, of rivers, of trees, the languages of the birds, all the animals and insects—and the languages of the stars.'- (3) The great new understanding is this: Our universe --- a single, irreversible, sequential, celebratory even — (4) Is not simply a place, But a story in which we are immersed, To which we belong And out of which we arose. (5)

We — live — our — lives — forward — into — mystery Within the Community of EARTH—
A "magnificent diversity...
in the coherence of an unparalleled unity"—(6)

where the biosphere and human culture Are not only emergent But radically and ceaselessly and astonishingly creative. (7)

How can we find a way to sink into these immensities? How can we embrace this intimate and ineffable journey into grandeur? (8)

Cameron Davis, Paula Guarnaccia and Sam Guarnaccia

## Awakening

"We are beings
In whom the universe
Shivers in wonder at itself — (1)
The space where earth dreams." (2)

Brian Thomas Swimme, Mary Evelyn Tucker

#### **Transformation**

Something of wonder is happening—
We are awakening!!—
to a renewed awe in the presence of mystery—
in the presence of what is.

'Like the ocean
with its power to pour through boundaries'—
We are capable of 'a profound intimacy of relationship...'
(1)
with the winds, sea, land—
-all the unnumbered forms of life in the great community
of Earth (2)
'Something radically new' has emerged—

"the capacity to experience the world" through another—
(3)
Imagination—
Infused with Empathy—moved by Compassion—
Living within "an undivided wholeness"— (4)
'a unified, glorious outpouring of being'. (5)

"For just as the Milky Way
Is the universe in the form of a galaxy
And an orchid is the universe
In the form of a flower,
We are the universe
In the form of a human.

And every time we are drawn to look up into the night sky Reflecting on the awesome beauty —
We are actually the universe Reflecting on itself.
And knowing this—changes—everything!!" (5)

Cameron Davis and
Sam Guarnaccia

#### To See a World

To see a world in a grain of sand And a heaven in a wild flower, Hold infinity in the palm of your hand And eternity in an hour.

William Blake



#### **Libretto Sources**

#### **Emanating Brilliance of Stars**

- (1) Adapted from: Brian Thomas Swimme and Mary Evelyn Tucker, *Journey of the Universe*, Yale University Press, 2011.
- (2) Brian Thomas Swimme, *The Universe is a Green Dragon*,
- (3) Thomas Berry, Worldly Wonder,

Life's Emergence

Adapted from: Berry/Swimme, *The Universe Story*, Swimme/Tucker, *Journey of the Universe* 

The Passion of Animals

Adapted from *Exuberance, The Passion for Life*, Kay Redfield Jamison, Random House.

#### Planetary Presence

Adapted from Brian Swimme and Mary Evelyn Tucker, *Journey of the Universe* 

### Time's Topography

(1) The phrase beginning "into monarch butterflies . . ." is taken directly from Swimme and Tucker, *Journey of the Universe*.

#### **Emerging Earth Community**

- (1) From a lecture by the poet, David Whyte.
- (2) From Swimme and Tucker, Journey of the Universe.
- (3) Adapted from Berry and Swimme, The Universe Story, p.258
- (4) From Swimme and Tucker, Journey of the Universe.
- (5) From Swimme and Tucker, Journey of the Universe.
- (6) From '—"The Gaia Hypothesis: Its Religious Implications", in The Sacred Universe, p. 116, Thomas Berry
- (7) From Stuart Kauffman, *Reinventing the Sacred*, Basic Books, 2008.
- (8) Adapted from Swimme and Tucker, *Journey of the Universe*.

#### Morningside Cathedral

Lyrics taken from the poem, Morningside Cathedral, Thomas Berry

#### Awakening

- (1) From Swimme and Tucker, Journey of the Universe.
- (2) Brian Thomas Swimme, *The Universe is a Green Dragon*, Bear and Company, 1984.

#### Transformation

- (1) Swimme, Tucker, Journey of the Universe
- (2) From the essay 'Worldly Wonder', Thomas Berry
- (3) Swimme, Tucker, Journey of the Universe
- (4) David Bohm, Wholeness and the Implicate Order
- (5) Brian Thomas Swimme, *The Universe is a Green Dragon*

.....

(6) Swimme, Tucker, Journey of the Universe

#### To See a World

From: Auguries of Innocence, William Blake

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Cover Image: The Cone Nebula resides in a turbulent star-forming region. Taken by the Hubble Space Telescope, this image shows the upper 2.5 light-years of the nebula, a height that equals 23 million round trips to the moon. The entire nebula is 7 light years in length. The Cone Nebula resides 2,500 light-years away in the constellation Monoceros.

Image credit: NASA, H. Ford (JHU), G. Illingworth (UCSC/LO), M. Clampin (STScI), G. Hartig (STScI), the ACS Science Team and ESA.

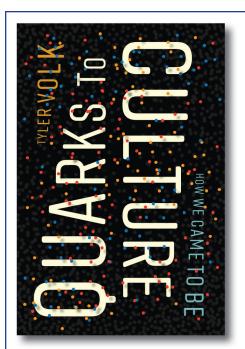
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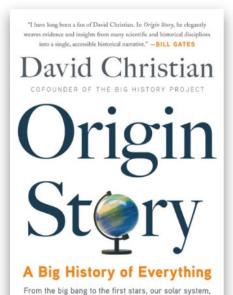
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