LAMINA project

a gallery/platform devoted to art/science

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Ann Parkin – Jody Rasch – Rebecca Kamen – Shanthi Chandrasekar

THE ARTISTS SPEAK ABOUT THEIR WORK

ANN PARKIN

"The first glimpses of the structure of the quantum universe are delicate tracks traced by subatomic particles in physicists' cloud and bubble chambers. It has been noted of these captured evanescent traces that, '[o]ur knowledge has been made by shadows."[1] The images of the subatomic world, which have inspired my work, are revelations of "that fundamental, invisible layer of life underlying visible reality."[2] The tracks of particle showers are sources of both knowledge and mystery concerning the essential, hidden inner structures of reality. They feed our sense of wonder and reveal to us 'the poetry of existence.' Though these images are but fragments of infinitesimally brief time, they afford us evocative glimpses of timeless reality. They are a portal for our yearning to connect with infinity, to find our place in the vast web of nature. "One cannot help but be in awe when he contemplates the mysteries of eternity, of life, of the marvelous structure of reality."[3]

1 *Looking glass universe: the emerging science of wholeness.* John P. Briggs and F. David Peat. 1984.
2 *Awe.* Dacher Keltner. 2023
3 Albert Einstein

JODY RASCH

***Sweet 3 – Diabetes*, 2024**
Acrylic on canvas, 40 x 40 inches
"My biological images explore our relationship with nature and the duality of our existence. Images such as this one, while beautiful to look at, belie their destructive qualities. The duality of the beauty of the image and its deadly nature is an allegory for the macro world as well and a metaphor to the beauty and fragility of life."
- Jody Rasch

***Observer – Particle Shower 1*, 1993**
Acrylic on canvas, 66 x 54 inches

“I had always been interested in science, particularly physics, and read a lot about relativity and particle physics. The realm of particle physics is like discovering a new philosophy. Particles can be everywhere at once and can both be waves or particles, depending on how we observe them. In particle physics, nothing is certain. Physics tries to answer the big questions on the nature of the universe. I wanted to find a way to represent these concepts in my art. Some of the images I use are of bubble chambers, where atoms are broken down into subatomic particles, each with its own mass and charge, which make different paths in the bubble chamber. The patterns are beautiful and seem like abstract patterns if one didn’t know what the subject matter is.”
- Jody Rasch

***Home*, 2024**
Acrylic on paper, 3 panels, 30 x 66 inches total
“Modern Science deals in extremes of size that, as the Nobel Laureate Roger Penrose noted, does not make sense on the human scale. Science, and astronomy in particular, has de-centered Man as the measure of all things, thus provoking a sense of cultural anxiety. This work shows our home galaxy where Man is not the center of the universe. It tries to put into context the place we hold in the universe.”
- Jody Rasch

REBECCA KAMEN

Roots of Matter 1-4, 2024
Acrylic on mylar, 17 x 14 inches
“Roots of Matter provides a portal exploring a unique biological relationship between man and nature. Through similar network dynamics in the brain and the root systems of mycelium (fungus in the earth), both micro systems convey information and messages through their complex web-like systems, providing a potential for impacting human behavior and the health of the natural world.”
- Rebecca Kamen

***Eclipse 1-8*, 2024**
Acrylic on mylar, 17 x 14 inches
“The Eclipse Series explores solar and lunar dynamics. Through contrast of forms and the layering of color, the paintings convey the mystery and awe one experiences during the observation of this rare convergence of two heavenly bodies.”
- Rebecca Kamen

A poetic response to the Eclipse and Roots of Matter series:

Entangled Essence
by Sam Illingworth
Beneath the surface,
murmurs of earth
entwine cerebral rumours.
Threads of thought,

mycelial strands –
mirrored mazes,
mapping the unseen.
In the loam's deep cradle,
neurons and fungi
echo every thought –
roots probe,
dendrites reach,
each a mimic
of the other's architecture,
a symbiotic script written
without words.
Above, as below,
our minds touch
the soil's soul,
learning the rhythms
of growth and decay –
where every whisper
carries the weight
of worlds
yet to wake.

Ecliphrasis
by Sam Illingworth
In the space where
light and shadow
cross,
the sun surrenders
its golden throne
to the moon's
silvered embrace.
Solar brilliance,
cloaked by cool sable
as day turns to dusk
across the face of noon.
In the penumbral blush
whispered tales of
darkened discs
slip from sight,
converging across time
in the silence
of eternal night.

“My artistic journey is a search towards the meaning of life and its place in the cosmos. Curiosity has been my driving force, leading me to ask questions about everything around me. This has led to my constant exploration and experimentation of ideas based on scientific and philosophical enquiry. Combining scientific facts and theories with my wild imagination has been fruitful in creating artwork that questions our known reality and seeks to learn more about the unknown. My educational background in physics and psychology, along with my love for cultural and philosophical traditions serves as my muse. My working method also varies from highly planned beginnings to random mark-making and unexpected path changers along the way. This combination of both planned and free flow approach leads to new possibilities and new directions, thus keeping me constantly excited about my work.

The *Neurocosmology* series of pen & ink drawings on 9"x9" and 30"x22" paper includes work inspired by both cosmology and neuroscience. It is an exploration of abstract concepts, ideas and theories that describe the universe we live in and our perception of it. I have juxtaposed brain cells with black holes in some pieces while others refer to the complex networks that are found at all scales of the universe including the brain.

The *Proton* drawings were inspired during my recent visit to CERN in Geneva, Switzerland, where I had the opportunity to see one of the colliders and learn about the experiments they conduct there. It was awe-inspiring to see the gigantic instruments used to study the smallest particles in the universe by colliding them and tracking the new particles that are produced in the process.

I find graphs fascinating, as they are usually a simple way to visually represent data that can otherwise be abstract and difficult to comprehend. A few years ago I came across some beautiful, but complex graphs in a science book on cosmology and incorporated them into my artwork. This led to my memories of the blackbody radiation graph, which I found beautiful while studying physics in school, and led to this series exploring different graphs with related ideas in the background.”
- Shanthi Chandrasekar

Graphs: Early Universe, 2024
Acrylic on canvas, 48 x 36 inches
“While working on a series of artwork inspired by cosmology, the study of the origin, the evolution and the ultimate fate of the Universe, I came across some very beautiful graphs along with the mathematics describing the theory of inflation in a research book. The mathematics was beyond my understanding, but I loved the graphs and decided to include them in my artwork. In this painting, I used a very complex graph with ideas referring to the beginning of the Universe like spacetime, energy and the creation of matter and antimatter in the background. Images of formation of structures and networks also float around in a space where order and chaos co-exist, and symmetries are created and broken.”
- Shanthi Chandrasekar

Graphs: The Ultraviolet Catastrophe, 2024
Acrylic on canvas, 48 x 36 inches

“In physics, theory and experiment don't always go together, and this disagreement can lead to new physics. The Ultraviolet Catastrophe is one of them where the theory to understand blackbody radiation predicted infinite energy levels beyond the ultraviolet wavelength while the experiments showed a different result. In "an act of desperation", Max Planck used math tricks to circumvent this discrepancy by quantization of energy rather than the classical wave theory of light, and this phenomenon was later explained by Einstein's photoelectric effect, leading to the emergence of a new field of physics called quantum mechanics. In this painting, the white lines refer to experimental results while the black one shows the theoretical prediction. The overlapping of the red and blue dots create a violet background on which horizontal and vertical sine waves crisscross along the square grids of the graph.”
- Shanthi Chandrasekar

Collisions: Protons, 2024
Pen & ink on paper, 30”x22”
“Millions of protons at nearly the speed of light collide in particle accelerators to study the mysteries of the Universe. In this drawing I have tried to imagine the fraction of a second when the proton collisions just begin. The dots represent the various particles produced during the collision.”
- Shanthi Chandrasekar

Grand Unified Theory- Astrocytes, 2024
Pen & ink on paper, 30”x22”
“Abstract concepts in physics like relativity and quantum mechanics that describe the universe we live in fascinate me and I am amazed at the ability of the human brain to unravel these mysteries. Relativity explains the universe at a large scale and quantum mechanics at the smallest, but there is a disconnect as gravity that works at cosmic scales cannot be described at the smallest and remains a mystery. In this drawing I have drawn a circle of astrocytes, one type of glial cells found in the brain which resembles a star, as the threshold between the outward cosmic and inward quantum realms.”
- Shanthi Chandrasekar

Proton, 2024
Pen & ink on paper, 30”x22”
“Though the proton is an integral part of an atom, its complex structure still remains a mystery. The proton is made of smaller particles called quarks that have three types of “color” charges, held together by the strong force carrying particles called gluons. These bonds become stronger when pulled apart and can lead to the formation of new particles, thus increasing the complexity of proton structure. This drawing, with layers of circles in three different colors, was inspired by this ever changing complexity in a proton.”
- Shanthi Chandrasekar