

Auroville Tomorrow

We do not belong to the past dawns, but to the noons of the future.

Ushus: 1

Sri Aurobindo

Kiran: 4

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Auroville's newsletter, rooted in the present,
focused on the future

A Century of Quantum Wonder, From Uncertainty to Unity

Electron

The electron on which forms and worlds are
built,
Leaped into being, a particle of God.
A spark from the eternal Energy spilt,
It is the Infinite's blind minute abode.
In that small flaming chariot, Shiva rides.
The One devised innumerable to be;
His oneness in invisible forms he hides,
Time's tiny temples of eternity.
Atom and molecule in their unseen plan
Buttress an edifice of strange onenesses,
Crystal and plant, insect and beast, and man, -
Man on whom the World-Unity shall seize,
Widening his soul-spark to an epiphany
Of the timeless vastness of Infinity.

— Sri Aurobindo

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Quantum Perception and the Metaphysical Truth

“They blended nothingness with being / and from these two, a world arose.”

— Rumi

On the centenary of the birth of quantum mechanics, perhaps no voice or vision bridges science, spirituality, and contemporary human perception like that of Sri Aurobindo.

For him, existence is not merely a physical phenomenon, but a multi-layered absolute truth that can only be accessed through conscious inner experience. Science seeks matter, mechanics, and the origin of the universe, but the deeper this search goes, the more it inevitably encounters the invisible doors of consciousness and the Absolute. Here, modern physics, particularly quantum theory and cosmology, arrives at a new understanding of creative void, a potential-filled vacuum, and the birth of matter from “nothing.” These concepts are not alien to Sri Aurobindo and Vedic mysticism; they are foundational.

In his poetic masterpiece, *Savitri*, he speaks of a universe that emerges from an **“endless nothing,”** from an **“invisible fire”** exploding in total darkness, where “zero” merges with “infinity” and gives rise to matter, stars, and galaxies. At a time when science in the 1920s and 1930s still viewed the Big Bang theory with skepticism, Sri Aurobindo revealed a truth that was both poetic and precise: “A gas was born from a formless fire / And its dense rings produced these million stars.” This description is not merely poetic imagery but a form of intuitive knowledge that forms the foundation of his evolutionary philosophy.

In his view, evolution is not merely a biological phenomenon but a conscious and spiritual journey: from matter to life, from life to mind, from mind to supermind, and from there to absolute consciousness. This movement is embedded in matter, not as a random outcome, but as a mysterious and predetermined aim within existence. Just as in quantum physics, reality depends on the observer and a particle’s position and velocity cannot be simultaneously determined, in Aurobindo’s cosmology too, consciousness is not just an observer; it is the creator and sustainer of the universe. **Matter, life, and mind are all layers of the same truth.**



Before the Big Bang, there was **“nothing”**, but not a negating, empty nothing. Rather, it was a nothingness full of everything. In Eastern mystical literature, this is the **“divine zero”** or the **“sacred void”**, something very similar to what physicists today call the quantum vacuum: a space where virtual particles are constantly being born and annihilated, where physical reality is but a fleeting manifestation of endless energetic movement. Sri Aurobindo calls this **“a strange and lawless base,”** where **“everything and nothing mean the same,”** and **“zero hides infinity within itself.”**

What sets Sri Aurobindo’s thought apart is not just the depth of his intuition but his desire to engage with contemporary science. Unlike mystical traditions that reject science, he seeks to draw from within science a deeper meaning of reality. For him, science and spirituality are two paths to the same destination. Science is a precise tool of the observing mind, but if it doesn’t go beyond the limits of matter, it merely circles the surface. Science must engage with the soul, the mind, and the spirit, just as quantum mechanics has unconsciously forced us to abandon a linear and absolute view of reality. This statement reflects not only his role as a cultural translator but also his effort to build a bridge between Eastern intuition and Western logic, a bridge we perhaps need now more than ever.

Sri Aurobindo envisions a universe in which matter, life, mind, and spirit flow within a vast spectrum of being; a world in which **“existence”** arises not from something, but from Being itself. What we now call the **“Big Bang”** is merely one of countless manifestations of this process, a process he sees as without beginning or end.

Modern physics, when dealing with concepts like **“dark energy,” “invisible matter,” “parallel worlds,”** and the **“multiverse,”** essentially speaks of a reality that mystical traditions described thousands of years ago in the language of symbol and myth.

However, the difference is this: mysticism trusts inner experience, whereas science still remains on the level of hypothesis.

He calls on science to move beyond the grip of materialism and to step into the realms of soul, mind, and spirit.

A science that moves toward divine truth must be new, a science that has not yet come into being... a science that will study the forces of life, mind, and what lies beyond mind.”

This is the **“science of the future,”** which, according to Sri Aurobindo, will be a giant leap forward, a science that goes beyond analysing quarks and protons to explore the essence of consciousness and the divine presence in matter.

Cosmic consciousness, the universal Purusha of whom all Nature is the Prakriti or active conscious Force. We can arrive at that, become that, whether by breaking the walls of the ego laterally, as it were, and identifying oneself with all existences in the One, or else from above by realising the pure Self or absolute Existence in its outgoing, immanent, all-embracing, all-constituting self-knowledge and self-creative power.

—The Synthesis of Yoga



From this perspective, the crises of modern science, from the deadlock of cosmological theories to the contradictions between quantum mechanics and general relativity, are signs of the end of an intellectual era; one that regarded matter as the sole reality and mind as a secondary byproduct.

In a world where physicists still debate whether the Big Bang happened, where top scientists speak of “creative nothingness” as the source of matter, perhaps it is time we listened to voices like Sri Aurobindo’s that saw the universe through the eye of the heart, long before physics tore space and time apart.

In a century where physics once again approaches a poetic and intuitive understanding of the cosmos, *Savitri* is not just a mystical epic. It may be the cosmological manifesto of the future, a world in which mind and matter, verse and formula, void and infinity, are no longer opposites.



**She was all vastness and one measureless point,
She was a height beyond heights, a depth beyond depths,
She lived in the everlasting and was all
That harbours death and bears the wheeling hours.
All contraries were true in one huge spirit
Surpassing measure, change, and circumstance.
An individual, one with cosmic self
In the heart of the Transcendent's miracle
And the secret of World-personality
Was the creator and the lord of all.**

Sri Aurobindo, *Savitri*, Book VII, Canto VII

—Anita Kamali, Writer, Co-editor of *Auroville Tomorrow Newsletter*

Ripples of the Infinite: Quantum Science and the Vision of Sri Aurobindo

Sitting by the lotus pond at the base of the Matrimandir in Auroville, I watched the waters move quietly inward, echoing a gentle rhythm that seemed to dissolve the day's waves into a centre of peace. The play of sunlight, the drifting clouds above, and the mirrored stillness below brought to mind not just the inner silence I was experiencing, but also another moment — decades earlier — at the Nuclear Science Centre in New Delhi, where I began my career as a physicist.

—Dr. Jayanti Ravi,
Secretary, Auroville Foundation, IAS



Back then, our discussions often danced between equations and the ineffable, where I would find myself drawn into conversations about quantum physics and its strange, almost mystical implications. Just as the water here moved rhythmically to a centre, so too did our thoughts spiral around the idea of the Infinite — something both science and spirituality sought, each in its way.

It feels especially significant now, as 2025 has been declared the International Year of Quantum Science and Technology by the United Nations under the leadership of UNESCO. This marks a century since the birth of quantum mechanics — from Heisenberg's breakthrough in 1925 to today's explorations into dark matter, entanglement, and the fabric of reality itself.

In quantum science, we find a world where light behaves as both wave and particle, electrons exist in multiple places at once, and particles remain mysteriously connected across vast distances. It's a realm where certainty dissolves — and the Infinite peeks through.

In a 1920s world still firmly rooted in classical Newtonian materialism, Sri Aurobindo boldly wrote:



“Science itself nowadays is neither materialistic nor idealistic. The rock on which materialism was built and which in the 19th century seemed unshakeable has now been shattered... The way... now lies wide open to spiritual truths, spiritual ideas, spiritual experiences. That is the real revolution.”

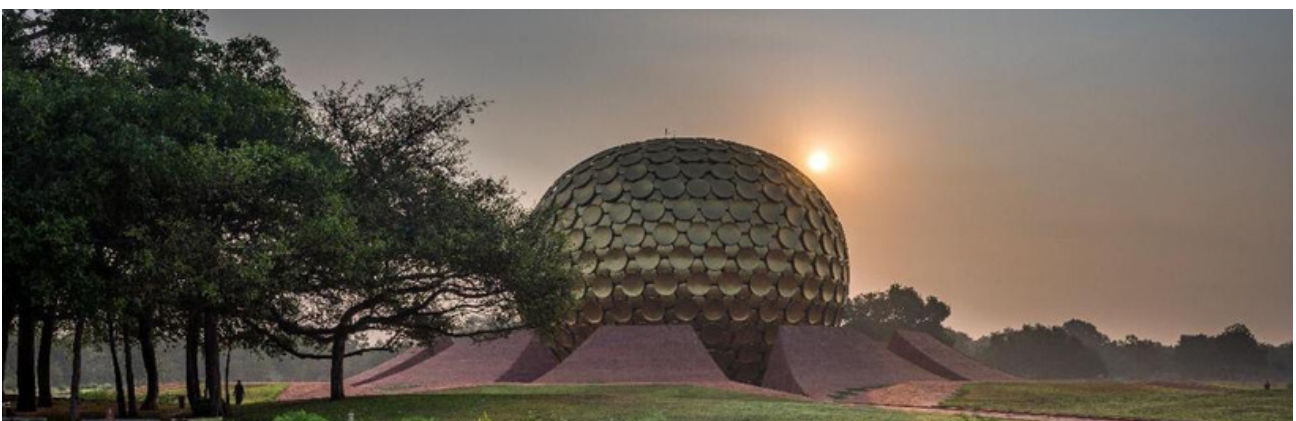
Recent discoveries continue to expand this domain. Just this year, astronomers confirmed the detection of a vast filament of the Universe’s “missing matter” — a 23.5 million light-year stretch of warm-hot intergalactic gas connecting galaxies in the Shapley supercluster. Long theorized as the hidden scaffold of the cosmos, these filaments embody the quantum-linked structure that may even be entangled across space-time.

Regular matter, also called Baryonic matter, makes up about 5% of the Universe, while dark matter (27%) and dark energy (68%) make up the rest, according to the standard cosmological model. One theory now posits that dark matter, which forms 27% of the Universe, could behave as a Bose-Einstein condensate — linked through quantum entanglement. If true, this suggests that non-locality — where things are connected beyond space and time — is not just a quantum quirk but a cosmic principle.

Sri Aurobindo’s vision of one consciousness behind all phenomena now finds strange echoes in this science: “All things are one being in a process of self-unfolding.”

Even the ancient practice of Yoga, which explores the unity of body, energy, and mind, resonates with quantum ideas — where the observer influences the system, and intention alters outcomes. The yogic idea of subtle bodies and fields of consciousness begins to feel less mystical and more like a deeper dimension of reality that science is slowly catching up with.

As I sat by the water and watched it ripple toward its centre, I sensed once more how the journeys of the physicist and the seeker are not separate. They are twin paths to the same truth — a truth that, like light, is both particle and wave; like being, is both finite and infinite.



The Universe's Echo: Convergence of Modern Physics and Mystical Poetry in Sri Aurobindo

For centuries, the universe was a grand, predictable machine. In the clockwork cosmos of Isaac Newton, reality was built from solid, indestructible bits of matter moving through absolute space and time according to immutable laws. Science was the act of observing this machine from a safe, objective distance. But in the early 20th century, this reliable machine shattered. The twin revolutions of relativity and quantum mechanics dismantled our most basic assumptions, revealing a universe that was fluid, paradoxical, and woven together in ways that defied all common sense. In this strange new cosmos—where solid matter dissolved into ghostly waves of probability and particles separated by light-years remained mysteriously connected—many thinkers heard an echo.

Contemporaneously, the Indian mystic, poet, and philosopher Sri Aurobindo was articulating one of the most comprehensive spiritual visions ever conceived. Through intricate Darshanas and sublime poetry, particularly his epic *Savitri*, he described a universal evolution, born from a divine nothingness, evolving with a hidden purpose, and built on a paradoxical unity of Spirit and Matter and later the Matter itself transforms into the Divine in a cosmic non-duality. The earliest manuscripts of the event date back to the first decade of the 20th century. His work was no poetic imagination resting on cerebral and emotional speculation, however lofty they might be, but a 'record of a seeing, of an experience' from a higher consciousness. Here we also take into account a short sonnet, 'Electron' written in the 1930s.



The stunning convergence of these two streams of inquiry—the physicist's empirical probe and the yogi's inward gaze—invites us to explore one of the most profound questions of our time. When physicist-author Fritjof Capra famously argued in *The Tao of Physics* (1975), that the worldview emerging from the bubble chamber experiments was beginning to sound remarkably like the reality described by ancient Eastern mystics for millennia, he also quoted Sri Aurobindo multiple times, famously pointing out the similarity in worldview between his and that of Niels Bohr.

Are science and spirituality destined to be at odds, or are they two different languages attempting to describe the same, ineffable reality? By placing the discoveries of modern physics alongside the visionary poetry and writings of Sri Aurobindo, we find that the echo between them is not just a faint resonance, but a chorus singing a unified song of a dynamic, interconnected, and conscious cosmos.

The Poet's Reply: A Universe of Spirit

While physicists were grappling with these paradoxes, Sri Aurobindo was mapping the cosmos from a different vantage point. His vision, born from deep yogic practice, proposed that the universe is not a random accident but a purposeful drama of divine self-discovery.

At its heart is a grand double movement. First comes Involution: a process where the infinite, divine reality, which he called like the Rishis before him as Sachchidananda (Existence-Consciousness-Bliss), willingly descends and veils itself, becoming its apparent opposite: the total unconsciousness of Matter. This isn't a fall, but a deliberate act of concealment for the joy of rediscovery. The crucial implication is that Spirit is not absent from Matter, but secretly locked within it.

Then comes Evolution, the reverse movement.

It is the slow, laborious re-emergence of this hidden consciousness, ascending from Matter to Life, from Life to the reasoning Mind of humanity. For Aurobindo, humanity is not the end of this journey but a 'transitional being,' destined to be surpassed by a higher, 'supramental consciousness' that will transform life on Earth into a 'Life Divine.' This entire cosmic story is captured in his poetry. His sonnet 'Electron' seizes upon the fundamental particle of physics and reimagines it as a 'particle of God,' a 'tiny temple to eternity.' His epic, *Savitri*, unfolds this evolutionary drama on a cosmic scale, chronicling the soul's journey from the 'fathomless zero' of creation's origin to the conquest of Ignorance and Death.

The Resonances: Where the Two Visions Meet

When we place the scientific and mystical visions side-by-side, the parallels are astonishingly precise. They are not identities—the physicist's equation is not the mystic's experience—but they are structural analogies of profound depth.

The Birth from Nothingness: *Savitri* opens by describing the origin of the universe as a 'fathomless zero,' a 'vacant Nought.' Yet this nothingness is not empty; it is a 'tenebrous womb,' pregnant with all potential. This finds a stunning parallel in the quantum vacuum of modern cosmology. Far from being empty space, the quantum vacuum is a seething cauldron of fluctuating energy, where particles pop in and out of existence—a 'plenum-void' that is forbidden from being a true nothingness. Creation, in both views, is not *ex nihilo* (from nothing) but *ex potentia* (from a latent, powerful source). The first creative impulse in *Savitri* is described as 'A nameless movement, an unthought Idea /...without an aim.' This is a poetically perfect description of a quantum fluctuation—a spontaneous, random, un-caused event that physicists believe could have been the so-called ultimate free lunch that gave birth to our entire universe.



The Particle of God and the Cosmic Field: Sri Aurobindo describes the electron as a “particle of God,” likening it to a spark from “eternal Energy”—a poetic metaphor that parallels Quantum Field Theory. In this view, the electron is not an independent object but a temporary manifestation of a unified field. He connects this to Hindu cosmology, calling the electron the “flaming chariot” of Shiva, symbolizing the divine rhythm of creation and destruction. The fusion of scientific and spiritual perspectives suggests a deeply interconnected, conscious universe, where even the smallest particle reflects cosmic wholeness.

The Unity of Opposites: This section explores the idea that contradictory elements are fundamentally unified. In quantum physics, wave-particle duality shows that reality can manifest as both wave and particle depending on observation. Similarly, Sri Aurobindo writes of the Divine as the “Two who are One”, where opposites like Light and Darkness, Spirit and Matter, are inseparable expressions of one Reality. His poetic phrase “tangle-dance of passionate contraries” captures this essential duality and unity at the heart of existence.

The Witness and the Observer: Quantum mechanics reveals that observation creates reality, collapsing wave potential into a definite form. The observer is active, not passive. Sri Aurobindo’s concept of the Witness Self parallels this idea: a silent, divine consciousness that brings form out of formlessness through its gaze. This vision equates the cosmic act of perception with the creative force of consciousness, showing that the universe is shaped by awareness.



Read in this light, the discoveries of physics and the insights of **mystic future poetry of Sri Aurobindo** become complementary for the perplexed modern human, whether she is a student of physics or philosophy. They become two wings of a soaring reality that is at once a scientific puzzle and a spiritual dance. **What is a ‘blind minute abode’ for a particle, also is a luminous ‘epiphany of the timeless vastness of Infinity.’**

—Aravindan Neelakandan, Governing Board Member, Contributing Editor, Swarajya.

Quantum Within, Ulrich Mohrhoff on the Future of Consciousness

On the occasion of the hundredth anniversary of quantum mechanics, I'm honoured to host Ulrich Mohrhoff, whose work at the intersection of quantum theory and the teachings of Sri Aurobindo sheds new light on the evolving relationship between science and consciousness.



1. The meeting point of science and spirituality often brings deep existential doubt. As someone rooted in both physics and Integral Yoga, how do you suggest one navigate such moments of profound uncertainty?

This kind of doubt arises from a misunderstanding of what physics truly is. Physics doesn't explain reality; it predicts outcomes from observed inputs. Classical physics allowed us to imagine causal mechanisms, but quantum physics prohibits such illusions. Quantum theory is incredibly precise in its predictions yet offers no explanations, making it an engineer's dream and a metaphysician's nightmare. The real tension isn't between science and spirituality, but between philosophical materialism and spirituality. Modern physics cannot even define what "matter" is; it may as well be Spirit. A British lady once asked me if I study Sri Aurobindo in the light of science. I told her: "No, madam, I study science in the light of Sri Aurobindo." From this perspective, the laws of physics are the self-imposed constraints of Spirit, necessary for the unfolding of evolution. So, there is no real "intersection" between science and spirituality, only the framework we choose to interpret reality through.

2. You've suggested that Sri Aurobindo's theory of consciousness evolution could be supported mathematically. Could you briefly explain how?

Not through mathematical reasoning. Nor does Sri Aurobindo's philosophy of evolution (or any other spiritual philosophy for that matter) require the support of science. What I did was to derive the theoretical framework of contemporary physics by positing Sri Aurobindo's philosophy and figuring out what laws it would take to set the stage for the Spirit's adventure of evolution.

3. What initially led you to Sri Aurobindo, and how did that encounter reshape your scientific worldview?

I do not have a scientific worldview, for there is no such thing as a scientific worldview. What many scientists peddle as “the scientific worldview” is a materialistic worldview. I could as well peddle my spiritual worldview as the scientific one, and for much better reasons. But that’s a subject too complex to get into here.

In my late teens, certain experiences led me to question my hitherto materialistic outlook and to surmise that the fundamental reality was Consciousness. One thing led to another, and a few years later, I obtained the Mother’s permission to visit the ashram and study at the Sri Aurobindo International Centre of Education. When I realized the enormous importance Sri Aurobindo attaches to the physical world, my earlier interest in physics returned, and I went back to Germany to study physics at the University of Göttingen, not to become a physicist but to learn how contemporary physics fits into Sri Aurobindo’s philosophy.

4. Some elders insist younger seekers follow the same spiritual path they did. From your view of consciousness evolution, how might we approach this generational tension more evolutionarily than prescriptively?

When you enter the spiritual path, you are answerable to no one but the Divine or your chosen guru. Here is a relevant quote from Sri Aurobindo: “The traditions of the past are very great in their place, in the past, but I do not see why we should merely repeat them and not go farther. In the spiritual development of the consciousness upon earth, the great past ought to be followed by a greater future. [29:480]”

5. In a post-pandemic, climate-affected world, both science and spirituality are being re-evaluated. Do you believe the quantum paradigm offers us a new kind of ethics, or even a new sacredness, in how we relate to life and matter?

People need to be disabused of the superstitious belief that science in any way, shape, or form has privileged access to truth. Quantum physics has opened enormous horizons of technological progress, which, unchecked by a commensurate spiritual progress, is likely to lead to technological suicide. On the other hand, when significant spiritual progress has been made, technology can be used to prevent this and other forms of civilizational suicide. All depends on humanity’s spiritual progress. Nothing depends on the quantum paradigm, which by itself offers nothing intrinsically positive, whether it be a new ethics or a new kind of sacredness. Its offerings are value-neutral.

Based on the insights of “Jean Gebser, I would say that science and technology are part of the mental structure of consciousness, which is now approaching the end of its deficient phase. This structure can no longer serve as the vehicle of consciousness transformation and has instead become an obstacle. In my view, with the emergence of an evolved consciousness, what Gebser calls “integral” and Sri Aurobindo calls “supramental”, the role of science and technology will gradually diminish and give way to forces that arise from the depths of this new consciousness.

The emergence of such a conscious-force in the physical world will gradually replace our mental ways of knowing and doing, science and technology, with its own perfect knowledge and wholly effective will. It will carry us from an enlightened consciousness that uses technology wisely to one that no longer needs it.

Bharat Kalari, Rekindling the Sacred Fire of Kalaripayattu in Auroville

Beyond the noise of modern martial arts lies a discipline not designed for combat, but for awakening. **Kalaripayattu, the mother of all Indian martial arts**, is now being revived in Auroville through Bharat Kalari, **the result of a vibrant cultural collaboration between Bharat Nivas, Auroville's Indian cultural campus**, and the renowned KalariGram. This partnership brings the timeless spirit of Kalaripayattu into the international and experimental space of Auroville, where ancient roots meet future possibilities.

Kalaripayattu is not merely a physical technique or a combat skill. It is a journey of self-discovery, weaving together conscious movement, mindful breath, Ayurvedic healing, and a deep connection with the elements. It works through the body, but begins with the spirit. It is a way of standing on the earth, aware, embodied, and fully present.

The roots of Kalaripayattu stretch across the southern coast of India, from Gokarnam to Kanyakumari, tracing back to ancient times. It was in this lineage that **Shri Lakshmanan Gurukkal, founder of Kalarigram**, was trained, inheriting a legacy from his father and guru, Shri Veerasree Sami Gurukkal, who had established the Hindustan Kalari Sangam in 1952 to preserve this ancient form. Legend speaks of Bodhidharma, a sage from the South, who carried the essence of this art to the East, where it inspired forms such as Kung Fu and Aikido. Once flourishing in medieval Kerala, Kalaripayattu was suppressed under British colonial rule, but today, from beneath those silences, its ancient flame is being rekindled in Auroville.

As one of the Kalari guides puts it: "When the breath and body are in harmony, prana flows through the being. You return to the soil, to the silence, to your root, not just your cultural root, but your existential one."

Bharat Kalari offers a living experience of this path, without the need to travel far. The training space is inspired by traditional Kalari-pit architecture, honoring the sacred link between body, breath, and earth. Every movement becomes a meditation, every session a poem written in muscle and breath.



This isn't just a place to train; it's a space to remember. It's a space to be disarmed, not of your strength, but of the habits that keep your body asleep. It is here that a young practitioner, barely in her twenties, once said after completing a session: **"My hands stopped trembling for the first time in years."**

There are no big claims or promises, only a space of presence, and the quiet transformation that comes from attention.

Kalari training doesn't just build stamina, flexibility, agility, and balance. It nurtures concentration, calms fear, and strengthens the inner being. Unlike what many assume about martial arts, this practice begins not with aggression, but with the stilling of the mind.

This space welcomes those seeking a conscious relationship with their bodies.

It is for those who wish to embody spirituality beyond books, to feel it viscerally. It is for those who have come to India not just to see, but to live it. And for Auroville's children and adults who seek a safe, grounded, and authentic space to grow.

Bharat Kalari is open to all, whether you have years of martial experience or arrive simply with curiosity.

Strength here is blended with softness, rhythm, and dignity. The opening ritual begins with lighting the lamp and honoring the sacred puttara (earthen wall). Yet what unfolds is not tradition for tradition's sake, but a return to conscious being.

As a member of the team puts it, "This is not a performance. It's a return. A return to the self, to the earth, and to the essence of being alive."

For programs, information, or registrations, follow [@bharat_nivas_auroville](#) and [@KALARIGRAM](#) on Instagram, or contact us via our website and email.

You haven't come to fight. You've come home.





Someone asked me, "How can we teach the children to develop cosmic consciousness?" And so I replied, "Develop it first in yourself."

So, first of all, you must think of this; you must first become aware that you are a point in the universal immensity, and not isolated but altogether joined with it. And then you must study yourself, observe yourself. You will immediately have the opportunity of seeing the vibrations which come from outside and pass through you, but are not generated in you, which you receive and express. So gradually, by studying, looking, observing, you become aware of that which is not limited. This is how you begin to acquire the universal or cosmic consciousness. Cosmic and universal mean the same thing.

— The Mother, Questions and Answers 1954, CWM volume 6