1. “Science and Spirituality”. **Question**: What is emptiness? What is form? Where does form come from? What is the mechanism by which form manifests?

2. NanoSpirit. **Question**: Can science be a tool, or a keyhole, to manifest aspects of the divine nature? And, if so, which aspects will be most interesting? How can we be present moment by moment?

3. The BIG bangs. **Question**: What is the understanding of time and evolution? Cyclic time? Yugas? Where are we now? What will come?

4. The needs of the body and the needs of I. **Question**: What do we mean with I or Self? How can we shift focus from the physical body to the I?

5. Amrita University. **Question**: What is the nature of the experienced world? What is the nature of the mind? How does it function in perfect harmony? From where did it come? Where is it going? Where will it lead? Who am I? What is life?

6. Competition. **Question**: How should research be organized in the future? Do we need ranking and competition? How should the quality of science be judged and evaluated? Do we need new criteria? What should they be like? How should we interact with each other? How important is the development of trust?
7. **Need for Self Awareness. Question:** How can we learn Self-awareness? How can we integrate Self-awareness in scientific approaches? Why will Self-awareness open up to creativity and innovation?

8. **Lamppost. Question:** How can we carry the light with us, so we do not need a lamppost to illuminate! How do we switch on the internal light?

9. **The Beautiful, The Good and The True. Questions:** What is the process of integration? How can we come from complexity and division towards an integrated universal whole?

10. **Ego. Question:** What is ego? Why do we have an ego? How do we get friend with the ego? Can we get rid of the ego?

11. **Future of technology. Question:** Is the technological development dangerous? Will technology be able to continually adjust and solve the problems it creates? Are there references to modern technologies in the ancient Indian wisdom? Like the Vimanas

12. **Communication. Question:** “You can only see the real with your heart, the essential is hidden from your eyes” says the little prince in the famous book of Antoine de Saint-Exupérys. How can we communicate directly, heart to heart? How can we move from discussion to sharing?

13. **Measurements. Question:** Can consciousness be measured? Are there physical processes that reflect the state of consciousness?

14. **Feedback. Question:** Are feedback included in the Indian traditions? What kind of omens are most typical? What meaning do they have?

15. **Inspired Action. Question:** How can we let inspiration flow into scientific work? What are the characteristics for the states we experience as flow? How can we establish a close connection between what we are doing and who we are? How can we be active present and do conscious choices?

16. **Curiosity. Question:** Is curiosity driven basic research the same as is meant by Karma Yoga, where focus is on the phenomena studied and not to obtain a specific result? Is it possible to open up and let things happen? How can we perform research without focusing on “the fruit”? 
1. “Science and Spirituality”

Scientists tend to agree with the ancient wisdom that the material world in reality is far different from what it appears to be. It is as though our brains are hard wired to see things on the surface. Below this surface appearance, which we apprehend through our five primary senses, there are deeper layers of reality, which we need to penetrate in the quest for truth regarding ultimate reality; this quest is shared by both science and spirituality.

Even scientists need to take a leap in their imagination to enter the sub-atomic world, a world which was initially believed to be made up of tiny discrete particles (quarks and electrons) whirling about at unimaginably high speeds in large empty spaces. With the birth of quantum field theory, the tiny particles that make up matter are now regarded as excitations of an underlying unmanifest 'quantum field’, in which anything is possible – where things emerge and things disappear with movements that cannot be predicted with any degree of certainty, and where everything is interconnected with everything else. The Buddha, some 2500 years ago, without the aid of any electron microscope or mathematical calculations, intuited this unmanifest (“unborn”) field, which he labeled as emptiness (sunyata), as being the absolute reality underlying all phenomena that are invariably changeable in nature.

Our essential nature is a mysterious Void – not an empty one, but a pregnant Void – full of infinite creative possibilities. Our underlying field of consciousness has an infinite potential to bring into being, sustain and dissolve any form of existence, all forms being interconnected. As stated in the Heart Sutra, one of the most famous of the Buddha’s teachings, Form is emptiness; emptiness is form.

**Question:** What is emptiness? What is form? Where does form come from? What is the mechanism by which form manifests?

2. NanoSpirit

“Scientific knowledge and spiritual knowledge are like two streams. If we merge these two streams we will find that we are able to create a mighty river, a river whose waters can remove suffering and facilitate the holistic growth of society”. Quote from Amma, Indian sage; opening address at a Nanotechnological seminar, Amrita University, in 2012.

What happens when the two rivers of science and spirituality merge? Can we use science as a tool or instrument to express what is happening when we encounter the timeless, the divine, the infinite? Individuals from all times have “reported” their mystical experiences. Some expressions are very famous (like “Form is Emptiness and Emptiness is Form”), but generally the individuals cannot take back to the ordinary consciousness more than they have words or artistic talent for. So even though they have been present in the unmanifest realm, and have been exposed for another reality, afterwards they normally only can describe the experience as bliss, enormous light etc..
There seem to be a discontinuity on the way from the unmanifest to the manifest, just like a veil is covering and afterwards we only have vague memories of something very blissful. But even short moments of experiences can be so strong that they can fill books and be decisive for the rest of the life of the individuals.

As we are evolving, as the evolution goes on, we gradually develop more insight. The Earth is not flat, the electrons are not the smallest particles, and science is developing faster than ever. Why are we evolving? What is the driving force? This is an enormous topic, but one simple answer could be that the consciousness wants to be conscious about itself; we are at least proud to say that a characteristic of humans is self-awareness, that we are conscious about our own existence.

A problem is that we cannot approach the unmanifest realm with desires, proposals, expectations etc.; it is the existence that must come to us! Hence, the normal scientific procedure is turned upside down. We have to open the doors so that the divine can approach us! And the best and most meaningful way to open the doors is to be aware of our ego, our desires, our expectations and ambitions. The doors open when we let go of all this and are present moment by moment. We cannot influence, neither on the results nor on the selection of topics to be investigated or the “method/instruments” to be used. Hence, it will be outside the control of our mind or ambitions to determine the subject; we have to trust that the subject or topic appearing in front of my witnessing self is the best one, is the one needed. As soon as we want to obtain something or get ambitions, we will lose the contact with the observer and easily end up in self-deception and defense strategies.

This is counter to existing practice at the universities, where all incentives focus on competition and individual grading; strengthening the ego feeling! Me being unique!
**Question:** Can science be a tool, or a keyhole, to manifest aspects of the divine nature? And, if so, which aspects will be most interesting? How can we be present moment by moment?

3. The BIG bangs

Let us take an overview of *evolution*, as now accepted and shared by the vast majority of scientists and anthropologists, based on ‘verifiable’ evidence. The commencement of each of these three stages – cosmological evolution, biological evolution and cultural evolution – reflects tremendous and explosive bursts of creativity of higher orders.

The ‘Big Bang’ is believed to have occurred, from practically nothing, *some 13.7 billion years ago*. Before this moment, there was literally nothing – no matter, no space, no time! *Space* and *time*, as we now understand these terms, were born at that momentous point in our collective history. Following that mysterious explosion, which generated tremendous heat and an amorphous cloud of burning gas (hydrogen), it took a long, long time – billions of years – for matter to form through cooling and consolidation and emergence of higher elements, in an expanding universe. Ever since, there has been a tug-of-war between the outward expansion of the universe and the inward forces of gravity within matter, with galaxies and stars being born or getting dissolved in an endless celestial dance of cosmic creativity. Our own planet earth is believed to have taken birth *some 4.6 billion years ago*.

At that time, very special conditions appeared, mysteriously – conditions that were just perfect – for the emergence of what is sometimes called the ‘Second Big Bang’ – the emergence of *life*, and that too, only on the planet earth, according to our current scientific understanding. Bacteria emerged from the primordial soup, and over time, higher life forms evolved, with growing levels of complexity and ability to reproduce themselves and evolve into higher living forms. Today, we have more than 50 million living species – a tremendous flowering of creativity and diversity in Nature, culminating, as of now, with the emergence of our human species, *homo sapiens*. In the context of the origin of the universe, we can see that human beings are relative newcomers in the unfolding story of evolution. It is another matter that *the vast majority of us do not see ourselves as merely transitional beings in an epic unfolding story of evolution; we believe that we human beings have come fully formed and complete, representing the pinnacle of evolution, ready to rule over Nature, over lesser beings and inanimate matter and the rest of the universe.*

Early humans are believed to have descended from their primate ancestors, the great apes, and have lived for more than a million years, and the stone-age tools they are believed to have invented reflect the first signs of human intelligence. But about some *50,000 years ago*, anthropologists believe that something dramatic may have occurred, something that some evolutionary scientists describe as the ‘Third Big Bang’ – the emergence of *mind*. We find, through archaeological discoveries, the sudden emergence of beautiful artwork on cave walls, use of ornate beads as jewellery, rituals such as burial of the dead with grave gifts.
organization of living spaces, exploration of humans into previously uninhabitable spaces and barter trade networks. It signifies the birth of human creativity and culture, through a creative display of human intelligence, and a progressive development of the human – from the hunter-gatherer to the agrarian to the industrial and to the modern information age; from the papyrus to the printing press to the telephone to the internet; from the cave paintings to the pyramids to literature and music; from the hand-axe to the plough to the tractor and the crane; from the ox-cart and horse-buggy to the automobile to the aeroplane and to the space shuttle.

It is in the human on earth that we see, in addition to mental intelligence and creativity, the emergence of reflective consciousness – a Fourth “big bang” the ability for self awareness – for reflecting on our own selves, on who or what we are, on life and death, on our evolutionary history… It is as though consciousness has for the first time become aware of itself through the human being.

The evolutionary process has retained all the previous layers, while adding new ones, and thus beneath the mind and its processes, there are the processes of the animal and material nature still at work unconsciously.

**Question:** What is the understanding of time and evolution? Cyclic time? Yugas? Where are we now? What will come?

### 4. The needs of the body and the needs of I

Ganesh Prasad Bagaria in Kanpur is giving a course in Human Values. The course is now implemented at more than 25 technical universities in India, and together with two other professors they have launched a book on the topic.

What we are today is the result of our pre-conditionings, our predispositions, our impressions and our beliefs. What we really want to be - comes from deep within us, and can be expressed as what is naturally acceptable to us. He asks:

*What is it that all human beings basically want? We want to be happy! And not in intervals, we want to be happy all the time. We do not want unhappiness, even for a moment.*

We must distinguish between intention and competence. Our intention is to make ourselves and others happy. But we keep on doing hurtful things towards others we don’t mean to do, because of lack of competence

To live solely on the basis of physical facilities is also called as living in animal consciousness. If we observe a cow, it is continuously occupied in getting some physical input from the environment. If we see ourselves today, we are also more or less doing the same. But for humans, physical facilities are necessary but not complete. Humans need a qualitative improvement in consciousness, a transformation from animal consciousness to human consciousness.

We must distinguish between the needs of the Body and the needs of the I.
Needs of Body are physical (nourishment, clothing, shelter), while the needs of the I are not physical (trust, respect, happiness).

Needs of Body are temporary in time (changing clothing depending on temperature), but we want happiness continuously.

Needs of Body are quantitative and limited (number of shoes) but we cannot talk about a half meter of love or a kilo trust. The needs of the I are qualitative.

The needs of the Body and the needs of the I have to be addressed separately. But today we assume ourselves to be primarily Body, and we try to fulfill the needs of I by doing something for the Body (food, clothing, cars).

Question: What do we mean with I or Self? How can we shift focus from the physical body to the I?

5. Amrita University

Amrita University in India is a high standard technical university, similar to NTNU. But there is a big difference; the university is sponsored by Amma. She is a sage that recently celebrated her 60th birthday. She is world famous for her hugs, and people stand in line for hours in order to receive a hug.

You get a taste of who Amma is by reading her opening address at a Nanotechnological seminar in 2012:

“Scientific knowledge and spiritual knowledge are like two streams. If we merge these two streams we will find that we are able to create a mighty river, a river whose waters can remove suffering and facilitate the holistic growth of society”.

She also says:

“Actually, spirituality is not without its proof. The great sages also conducted research – only their research was not done in an external laboratory but in the inner laboratories of their minds. Through intense inner enquiry, they arrived at answers to questions that have haunted humankind for ages. What is the nature of the experienced world? What is the nature of the mind? How does it function in perfect harmony? From where did it come? Where is it going? Where will it lead? Who am I?”

In a recent meeting at the Nanotechnological Department at Amrita University in Kochi, we met 30-40 PhD students for a dialogue on the relationship between science and spirituality:

- we are not so focused on results, our focus is on our work and what we are doing
- if something goes wrong it was meant to
- we trust an inner guidance
**Question:** What is the nature of the experienced world? What is the nature of the mind? How does it function in perfect harmony? From where did it come? Where is it going? Where will it lead? Who am I? What is life?

**6. Competition**

He research communities all over the world is dominated by competition. The prevailing philosophy relies on competition between individuals, research groups, departments, faculties and universities in order to foster excellence. Detailed measurement systems have been developed in order to rank the quality and quantity of research. Awards and Center of Excellence are praised.

Why should we compete? If we are creative we don’t need the “false” stimuli from competition. When we are centered and know our abilities and involve ourselves wholly in the task at hand, we don’t need to compare with others. If we really want to compete we should compete with ourselves.

Today we are told 100 times, “if you have to survive in this world, you must compete”. Hence, we start competing. But what is the fact? The fact is that what is naturally acceptable for me is excellence.

We want excellence, not competition.

We have tended to assume that by competing, our abilities grow. The fact is that we humans can grow only in relationships.

As our feelings in relationships grow they slowly expands to include the entire world family and we are able to see each and every one as our relative.

**Question:** How should research be organized in the future? Do we need ranking and competition? How should the quality of science be judged and evaluated? Do we need new criteria? What should they be like? How should we interact with each other? How important is the development of trust?

**7. Need for Self Awareness**

We have been conditioned to focus our minds on all things external, upon the objective world outside. Science (physics, chemistry and biology) is largely an investigation of the objective world and its laws and processes and it has given us great insights into the material processes of Nature, its laws and forces. However, even while these sciences have given us great knowledge and control over the mechanical, physical, chemical and biological forces of Nature, we have very little understanding and mastery over our own psychological nature, its laws and forces.
We have very little Self Awareness.

Unaware of, and unable to control, the unconscious forces and impulses that drive us from within, we are not equipped to deal wisely with the tremendous powers unleashed by science and technology. Our education is also focussed on the external world, striving to aim for further and faster technological progress, with hardly any emphasis on inner development.

As a result of this lop-sided development, it is not surprising that these very technological advancements are often misused, and the advancements themselves lack a holistic perspective of development. Narrow self-centred impulses get the better of us, and we become helpless victims of the destructive psychological forces of aggression, greed, gluttony, fears, hatred, selfishness, corruption, etc. Material benefits are disproportionately distributed across many parts of the world, and we have an ironical situation of surplus at a few pockets versus scarcity in many parts of the world.

Growing environmental pollution, resource depletion, competition, financial stress, psychological breakdown and violence across the world demands a radical review of our own actions. There is tremendous suffering and destruction of life happening on our planet, and these issues cannot be addressed or resolved without having a deeper insight into ourselves and without having some mastery over the forces that govern us from within, i.e., the psychological forces that govern our everyday actions.

Self awareness begins when the mind turns back upon itself and wonders: Who am I? What am I doing? What is my life purpose? How can I live more meaningfully? This ability for self-reflective awareness is a unique gift that human beings seem to have, but apparently, a gift that they seem to have left unexplored.

Self awareness is the awareness of the many aspects of the self, the observer, the pure being who is behind the unfolding saga of life – individual, collective and cosmic. It is the doorway opening to a deeper understanding of consciousness and its evolution.

There is a deep-rooted evolutionary impulse in human nature towards progress and perfection and this impulse pushes humanity towards creativity and innovation to make life better and more perfect. There had always been dreams of an ideal society, of a golden age, of truth and goodness and beauty, and these ancient longings have always captured human imagination and creative effort. In our current age when all systems are in crisis, this deep-rooted impulse towards a greater perfection of the individual, society and the world, becomes increasingly intense and demands a greater effort from all of us.

Professor Devdas Menon at IITMadras is now offering a pioneering course in “Self-Awareness”, and he has written the book “Stop Sleepwalking Through Life” to encourage self-reflection among the ambitious students.

**Question:** How can we learn Self-awareness? How can we integrate Self-awareness in scientific approaches? Why will Self-awareness open up to creativity and innovation?
8. Lamppost

Classical scientific methods and belief systems may set up walls in beforehand. Our data might include information that are outside the accepted objective measurable, but we are still designing experiments and studies that omit personal or spiritual elements because we are at loss to include such aspects. It is like looking for our keys under a lamppost because that’s where the light is instead of trying to find them where we actually lost the. Hence, we might be dumping science firmly under a lamppost, and we will never locate the keys.

This appears to be our dilemma: shall we look for our keys where we lost them but cannot see them, or shall we look for them under the lamppost of science, where we will not find them!

**Question:** How can we carry the light with us, so we do not need a lamppost to illuminate! How do we switch on the internal light?

9. The Beautiful, The Good and The True

These three words, so frequently quoted in the literature, undoubtedly cover essential parts of our lives. They express three great ideals. But where do they come from? What are the words referring to?

The **Beautiful** is related to our personal or individual experiences. In the presence of beauty we become conscious of inner glowing warmth as though forces are streaming into us. But the tree I admire for its symmetry and beauty, might irritate another because it blocks his lookout. My inner feelings and connectedness will depend on my experiences and my values. The sacred has myriads of expressions and each person has her individual taste of what beauty is. We all have this friend of beauty within us, we can feel it, but it can often be difficult to be consciously aware. Moments of beauty can appear as direct openings or channels to hidden depths within. That’s why glimpses of beauty can be experienced as so overflowing.

The **Good** in life is related to the fact that we are not alone, we have plenty of fellow-beings and we also have the capacity to feel compassion for others. Suddenly I am out of my box; I am not alone in the world. I get an urge to share and let other participate in my life, and I also listen carefully to the others. This aspect of we is behind the societal developments and organizing, cultural understanding and the prevailing moral.

The **True** is related to events or statements we all can agree upon. It might turn out to be a temporarily truth, but we all more or less agree for the time being: it is an objective fact! In sports-competitions there will always be a winner: the first one crossing the goal-line is the winner. It can be photographed and timed to hundreds of a second. It is a fact. We can complain and regret, but a fact is a fact. The pursuit for objective truth is the holy cow in modern science; the same results shall be reached by other scientists independent of the first discovery. The results shall not depend upon the human error or opinion, her likes and dislikes, the explanations shall be agreed upon by everybody.
In to-days society the beautiful, the good and the truth are split in separate sectors. We have divided the society in an almost infinitely number of sectors, each with their ideals and organizations, defending and protecting and arguing for their concerns. The splitting up is a natural result of our increased mental capacity and technological and scientific achievements, where rational judgments and logical thinking are dominating. These qualities are characteristic ideals for modern science, which claim that the objective Truth, valid for everybody, only can be reached if the subjective Beautiful and the compassionate Good only play minor roles in the societal development.

It is striking to observe that the organization of the Greek temple-grounds, like Delphi and Epidaurus, reflects an integration of the beauty, the good and the truth. When we look at Epidaurus, we identify three major constructions: the temple, the amphitheater and the stadium. These are masterpieces by their own, and have served as sources of inspiration up to our times. But as opposed to our modern splitting up, these constructions must have invited for integration.

Spiritual worshipping, theater performances and sports competitions at the same camp-ground! A feeling of wholeness is created. The psychological messages from the tragedies and comedians (the good) together with the physical achievements at the stadium (the truth) were not separated from the worshipping in the temple (the beautiful). This ability to integrate important aspects of the human psyche; the individual I, the ethical we and the societal it, is also reflected in the tremendous achievements in ancient Greece.

**Questions:** What is the process of integration? How can we come from complexity and division towards an integrated universal whole?

10. Ego

How can we know when our inspirations and presence is real and not colored by egoistic needs?

The ego has many hiding place, and can easily fool you and give you just what you desire or demand. If you feel you are important, that you are special and deserve more attention than others; this can indicate that the ego is playing his intoxicating and colorful game.

As soon as you start talking negative about someone or even think negative thoughts about others, you can be sure you have lost contact with the spiritual part of you. Blaming and judging, doing others wrong are warning signals! Stop! Step back and center yourself in the heart. The doorway to the deeper self goes through the heart. A certain feeling of Joy, a mysterious vibration, is an indication that you are centered in the heart.

We are so used with comparing and judging, they have become deep habits and it seems we need them in order to confirm ourselves. We habitually search for acceptance from others: to be liked, to be popular, to receive positive response, to win awards, to obtain success. The whole lifespan becomes a struggle to be accepted by others, and finally to be praised in the obituary notice!
**Question:** What is ego? Why do we have an ego? How do we get friend with the ego? Can we get rid of the ego?

**11. Future of technology**

(An imaginary interview based on “Why the future does not need us” by Bill Joy, founder of Sun Microsystems and Java, in *Wired*).

"Hi Bill, nice to meet you. How are you to day?"

"Hi. Thanks. I'm fine"

"What does the future look like for you?"

"As you might know I am not an opponent to the technological developments, but at present I observe three trends that make me anxious. Three modern technologies, gene - nano - robot, they all has the potential to cause enormous harmful effects"

"But history teach us that we smoothly will adapt to the new technologies and enjoy all the benefits"

"What is exceptional with these technologies are that they are developed by private companies and will be hard to control. An atomic bomb can only be detonated once, while a virus, a nanomachine or a robot in future perspective can reproduce itself. And maybe come totally out of control"

"Is this Science-Fiction?"

"Sorry, the answer is no. I know that we in the near future will produce computer chips based on single atoms technologies. We have no realistic idea of the computer power we are approaching. What will happen when they learn to reproduce themselves?"

"Frankly speaking, how do you react Bill? How do you behave?"

"I go with my grandmother"

"Your grandmother?"

"Yes. For sure, she was not opposing the progress and improvements. But she found it very arrogant that humans were developing intelligent robots without having a deep understanding of themselves. We need more modesty. We are working on technologies that by far exceeds our maturity"

"I understand. I guess more and more people reason as you, but how shall we....."

But he could not answer me how to meet the challenges.
**Question:** Is the technological development dangerous? Will technology be able to continually adjust and solve the problems it creates? Are there references to modern technologies in the ancient Indian wisdom? Like the Vimanas.

![Image of ancient Indian scene](image)

12. **Communication**

Do we really see other persons, their background and motivations, or are we so much trapped in ourselves and our own needs that our surroundings mainly appears as means for our own interests? We often have the best intentions to really listen, but more or less automatically we soon get lost in our own thoughts, and associations from own experiences pops up. So instead of being present and listening vigilant with our heart we start formulating our own stories and gets eager to bring it forward.

*Debate.* We love to watch TV debates between politicians and public figures, who is winning-who is losing, who has the best tactics? And next day the newspapers present the opinion poll! It is really entertaining and you can let the emotions free and yell at the persons and opinions you dislike.

*Discussion.* We enjoy participating in discussions to demonstrate how brilliant we are, how much we know, how much we have experienced, how clever we are in formulating our point of view. Not only are we interested in exposing our self, it is equally satisfying to point out weaknesses or logical flaws in the arguments of others. We are so used with discussions that we even use this word to describe private or familiar conversations and talks. So even when we are close to each other and essentially has no need to dominate, we more or less automatically want to demonstrate our excellence.

*Dialogue.* The word dialogue has become popular: Let’s have a dialogue! This is usually to underline a kind of openness and a promise to listen more carefully. But how often are we able to turn our focus on the other and listen with curiosity and interest? How often are we really interested in what the other is saying and ask questions to clarify and understand the
intentions? If we do so, we will often be surprised because it turns out that what seemed to be a contradictory point of view compared with mine, slowly changes as we understand the background and the original intentions. We realize we are more in tune, more similar, than we first thought. We are breeding the same air and created by the same spirit.

**Sharing.** Sharing is a non-demanding and unconditional form for communication. Basically we share our “history”, our thoughts and our feelings without being interrupted. We can feel the attentive presence of the others and we open ourselves to deeper and deeper layers. Actually we start listening to our own voice and become more and more aware of our own depth and inner realms. Unconditional sharing takes place between open hearts and we appreciate the flow of energy and the feeling of lightness and stillness. There is no need to convince or defend. We are not looking for convincing arguments, we have no specific ambitions or wants; we simply feel the joy of being in the present, honest without any camouflage or mask.

How can we communicate in an open and natural way without bringing the others in a defense situation? Can different points of view meet in an open and inspiring manner, where the intention is to explore and widen the space of latent possibilities and not to convince the others that we are right? How can we avoid making right/wrong and stay curious and open while we explain our current ideas. Self Awareness is the doorway to a mindful communication. By seeing ourselves we can avoid our egoistic need for self-justification, to be right, to dominate to win an argue. When we are present in our hearts we notice the compassion and openness towards others, we suddenly feel the oneness and relax into what is.

How do some people achieve to make us feel safe to talk freely, while others emit this energy making us think «I can’t trust him, I won’t let my heart speak»? May body contact (e.g. holding hands, maybe even only before talking) help to communicate from heart-to-heart? May it help to connect with a stranger?

**Question:** “You can only see the real with your heart, the essential is hidden from your eyes” says the little prince in the famous book of Antoine de Saint-Exupérys. How can we communicate directly, heart to heart? How can we move from discussion to sharing?

**13. Measurements**

Can we apply sensitive instruments to objectively measure if you are genuine or not? If we are truthful or not?

During the last decade, the nano- and bio-technologies have developed a range of new sensors to catch the neuronal activities from our brains and organs. Recently so-called scanners have been introduced to supplement the medical diagnosis and probably in the near future substitute a range of to-days manual examinations. Our bodies can be examined by sensors that pick up and magnify the very weak electromagnetic signals emitted from your internal
processes. The signals are then interpreted and we receive a neutral diagnosis and proposals for relevant treatments, within a few minutes. Maybe we can use such systems to evaluate the strength or relevance of the opinions we are holding? Maybe we can identify characteristic signals emitted by the body, very weak signals. Known examples are the alfa-, beta-, delta-waves from the brain.

One measurement system is the “commercial” HeartMath device, which uses biofeedback measurements of the two main clocks of the human body, the heart rate and the breath rate. The heart is connected through the nervous system directly to other major organs and is able to sense their need. By its heartbeat, it is able to broadcast a common signal to every cell. Breathing is the one physical function, which is both involuntary and voluntary. It is the key control over the autonomic nervous system (ANS), which lies outside our awareness and runs entirely unconsciously. HeartMath measures the Heart Rate Variability (HRV) and quantifies the degree of coherence.

The nanotechnology opens up for the development of totally new nano-sensors/NEMS (nano electrical mechanical systems) for measuring subtle vibrations and fields in the body. Maybe we can approach the cells and establish direct contact. Examples are accelerometers from air bag technology and SQUID magnometers for detecting miniscule magnetic fields.

Will it be possible to design diagnostic tools that help its users to know their current levels of development of different states of consciousness? Can we develop an app, installed on the mobile phone, that can tell you if you are honest or not, if you are deceiving yourself and should correct behaviour. It could be an on-line call from your unconsciousness. A warning signal from the mobile, bip bip biiiip, if you are deceiving yourself.

**Question:** Can consciousness be measured? Are there physical processes that reflect the state of consciousness?

**14. Feedback**

How can we be sure that we are not fooling ourselves and be sure that we are in the flow of Inspired Action? We are certainly not connected when we get irritated or start blaming.

I get trust through confirmation or feedback:

*Auspicious coincidences.* Suddenly you meet the right person at the right time at the right place. What a coincidence! An example is how I coincidentally met Ronny and for some reason told him about the visit of swami ji, and he immediately responded that this was very interesting and he suggested we should arrange this meeting! Out of the blue for me.

It happens everywhere. Why does this happen? What is the probability?
Synchronicity. Have you ever attended a meeting and suddenly somebody is saying exactly what you were meant to say...except that the formulations are much better and the impact stronger. How can this happen? How are we connected?

Example. I spent a sabbatical at a university and after a period of planning I finally succeeded to get an appointment with an important person at 13:00. Before the meeting, I attended a guest lecture on a very fascinating topic, and got so absorbed that my feeling of time disappeared. Suddenly there was a sound, svusssshhh, the screen turned dark, and both the projector and the laptop collapsed. “I have never experienced something like this before” the professor exclaimed...suddenly I realized it was 12:55; I had just enough time to reach the appointment if I speeded up. “Sorry for disturbing an excellent presentation” was my last thought before I left.

Surprise. Each day has its surprises. Things happen unexpectedly, for which we had no idea about beforehand. We get stuck and lose control for a moment. The mind is bypassed and we feel we are working on another frequency.

Every night before I go to sleep I memorize the surprises I experienced during the day. I start with the last one and continue backwards, and usually fall asleep before I come to the first morning surprise! So I fall asleep with a fresh surprise!

Golden Moments. How do we meet the unknown? How to prepare for the unknown?

The legend of Parsifal and his long quest for the Holy Grail is a good example of how conditioned we are that we don’t recognize the string of golden moments on our way.

Eventually, after many years, Parsifal arrives at the castle where the Holy Grail is kept, but without knowing it. During the evening meal the magical objects are shown, but of pure politeness Parsifal does not ask his host, The Fisher King, what it is. Even during a second parade he does not utter a word, and let the Grail pass without identifying it.

The next morning, Parsifal finds that he is completely alone in a deserted castle. And after he has passed the drawbridge and looks back, the whole castle has vanished.

Parsifal was conditioned to follow the societal demands and rules, to be polite. We are all preconditioned and we perceive the world through a small peephole. We are certainly not prepared for the unknown

Symbols. From ancient times the appearance of symbols or sudden events are interpreted as omen from the gods. The other day I sat on the front steps of my house and concentrated on this text. Somehow I got the impulse to look up, and what did I see? An eagle circling 2-3 times just above me up in the blue sky, and then suddenly swerve and disappear. “Thank
you”, I heard myself say and felt an enormous support for continuing with my preparations for this meeting.

Other typical signs we can receive are from clouds or mountains that resembles faces or other images. Typically we have no idea in beforehand; we just get the impulse to look in a specific direction: and there it is! It feels like a kind of contact or approval.

**Question:** Are feedback included in the Indian traditions? What kind of omens are most typical? What meaning do they have?

**15. Inspired Action**

There is a fundamental skepticism and massive resistance against mixing objective science and subjective religious believes. But as the old regime of religion and established churches are gradually substituted with a more personal inner spirituality, with no outer demands and nothing to defend, the time has come to discuss the relationship between spirituality and science again. Can we open up for the inner world as an answerer on the one-sided focus on ambitions, competition, career and own success to be the dominating aims of our lives?

We want to have a close connection between what we are doing and who we are. We do not want to be sleepwalking through life, conditioned by predetermined habits. We want to be active present and do conscious choices. But we generally lack the insight and skill to realize this. We are not aware of the choices we make, we follow our habits (due to conditioning) and our personality is imposed by the society because in this way we feel protected and safe.

By becoming Self Aware, aware of ourselves, we can reduce this conditioning. Inspired Action comes out of this Self Awareness when we feel the flow, when choices and actions flows directly from the unmanifest.

Many scientists experience a flash of insight, for example in the bath-tub (Archimedes: Heureka! Heureka!) or during a jog. We are completely relaxed; we have no ambitions, no desires and no wishes. Inspired Action lacks the Ego Drive.

**Question:** How can we let inspiration flow into scientific work? What are the characteristics for the states we experience as flow? How can we establish a close connection between what we are doing and who we are? How can we be active present and do conscious choices?

**17. Curiosity**

*Science has taken a wrong turn and forgets to prioritize basic research, says Nobel laureate and quantum physicist Serge Haroche.* (Speech at the ESOF2014 conference July 6th 2014)

“Historically, the major technological breakthroughs have come from basic research which wasn’t originally conducted for that purpose -- progress just happened, because researchers were curious about nature,” he says.
“In that way they discovered new phenomena and it turned out that these phenomena could be put to good use. But applicability wasn’t what the researchers that made the discovery had in mind,” says Haroche.

When Haroche was awarded the Nobel Prize in physics, the Nobel committee stated that it was due to his “ground-breaking experimental methods which make it possible to measure and manipulate quantum systems.”

Specifically, what Haroche is able to capture and measure is light particles, known as photons. However, at the beginning of his career photons hadn’t even been his main interest, Haroche explains.

“That I should move in that direction wasn’t at all something I decided back then, 30-40 years ago. It was something that happened as my research developed and I got more and more tools that made it possible,” he says.

**Question:** Is curiosity driven basic research the same as is meant by Karma Yoga, where focus is on the phenomena studied and not to obtain a specific result? Is it possible to open up and let things happen? How can we perform research without focusing on “the fruit”??