# "Bio-Green-Economy" Albert Einstein, 1954- Motto:

"The future requires substantially new manner of thinking for the survival of humanity"



http://www.ssmic.com/UploadedFiles/image/Workshops/october2009bioeconomy/bioeconomy\_web3.jpg

The innovative ideas that through science and technology affect the social development assessing the economic direction of the future growth of innovation. Therefore an deep enhancement in sharing innovation and creativity it is necessary for improving new productive and social alternative development; unfortunately most can not perceive clearly this contemporarily challenge. As a matter of facts instead to believe to a opportunity of developmental change, people seem to hope to recovery the old industrial development that has found the basis of scientific knowledge in the reductionism of the ancient mechanical ideas, which are diametrically away from the need to understand life and its natural evolution. In spite of this the mechanic reductionism today progressively and irreversibly generates "entropy" in the environment destroying biodiversity and with it the opportunity to sustain consciously the life our planet. (1)

The 3\* workshop aims to Quantum Bionet (2), would indicates a strategy foe a new cognitive development nd innovation in order to grow a better conscience that requires the overcoming old ideas of limited mechanical science, because today the ancient paradigm of science has not more value to promote the need of an alternative development, more appropriated to foster the future of **Bio and Green economy**.

# So that the mission of the 3\* QBN Ws. is focused on te the following goals:

- a) Change the world will become possible only by changing the mechanicistic ideas that are the intellectual deep cause to the high devastation of the world during the industrial epoch.
- b) Developments on cognitive change oriented to an implementation of bio-economy, are necessary to promote the framework for renewal of green economy

#### Some conceptual premises about the emergence og Bio-Green Economy.

Limits of classical mechanic-science was explored during the XIX-century by the studies of subatomic quantum particles. Therefore we know that fundamental biological processes that involve the conversion of energy into **quanta** are usable for bio-chemical transformations that are in its nature based on quantum bio-physics . (3) One of the most important bio-quantum products involves chlorophyll's photosynthesis producing complex bio-chemical reactions that are essential for life processes. (4)

Besides, because all the living process are regulated by genetic information it become necessary a radical reinterpretation of biology in terms of "quantum genetics" as iniciates the experimental work of the Russian quantum physicist Peter Gariaev et al ; they have demonstrated that electromagentic signals are of key importance to understanding of the workings of DNA in the regulatory functioning of life. (5)

It is important to remember that a new nterpretation of quantum aspect of life was iniciated by the American quantum physicist **David Bohm** (20 December 1917 – 27 October 1992); he works aiming to develop a critical assessment of quantum mechanics through the study of **entanglement of minds** to elevate the consciousness of people abouth the importance of quantum biology -transformation. (6)

The basis of those previous research of Gaiaev and Bohm are focused on the quantum entanglement (7).

The Quantum Entanglement was conceived by **Erwin Shroedinger** in 1926 and after will better defined as a trasformation of the duality of wave-particle in the booklet of Schrödinger in 1935 written in the booklet **"What is Life"**. (8)

In synthese now we know that for the traditional Quantum Mechanics accepts the existence of wave-particle duality; hence each quantun has simultaneously both behaviours of waves and particles that corresponds to two diametrically opposed concepts: in fact a wave extends in a non-local field of space, while single particles have each a definite location.

Unlike with the **Entanglement**, in special condition of trapped particles, the wave-particle duality undergoes to a space-time transformation. Indeed when two or more particles are entangled, two synchronous processes occur: first is forming an extended field of energy living in a new space-time dimension, *where it is possible the simultaneity of information*, and thereafter the field of simultaneity of information, can be reversibly dissolved, so that again appear the independent (or localizable) quantum particles. (9)

Therefore simultaneity and synchronicity in transfer quantum dynamics can be seen as the most important terms of **quantum entanglement**—**disentanglement** innovation in quantum physics, that permit to develop new concepts going over the heart of the profound difference between mechanical concepts in classical and traditional quantum mechanics.

At the 3\* Workshop of Quantum BioNet we will be co-organized with EGOCREANET to look for interdisciplinary bridges between science and art to show how the focus of Nonlocality of information through quantum entanglement, could be of central importance to promote new technologies in Bio-and Green economy, in order to develop new opportunities of growth ad a preliminary approach for improving the partnership to reply to the European call KBBE.2011.4-06 on Bio-Economy Promotion (10)



### Synchronicity (W. Pauli 1952) Motto:

"It would be most satisfactory if *physics* and *psyche* could be seen as complementary aspects of the same reality"

## **BIBLIO on LINE**

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