

## **TOPIC 2012 THE LARGE, THE SMALL AND THE HUMAN MIND** (PART 2)

About 10 years ago, Roger Penrose was for the first time a guest in Lucerne in the Lucerne Theatre on the occasion of the Symposium *The Enigma of Consciousness* (2001) which was organised by the New Gallery Lucerne. At that time, the issue at stake was that quantum processes might play a decisive role in sustaining the emergence of consciousness and it led to a now almost legendary dispute among the participants revealing fundamental epistemological differences.

The Orch OR consciousness model proposed by Roger Penrose and Stuart Hameroff criticises the prevalent view on the brain and the mind. It rejects neuroscientific explanations of consciousness, arguing that the processes involved that give rise to consciousness should be located much deeper underneath the neural structures on the level of quantum-physical processes taking place in microtubules. For the first time, the most recent research results from the field of molecular electronics and mathematical biology – which offer a more comprehensive view on the function and complexity of the microtubules in the human brain – will be presented in Lucerne to a larger audience for controversial discussion. Roger Penrose's impressive and far-reaching research program will provide the core of the debate by including in particular the polemics that numerous scientists have rekindled against the idea of a fundamental role of quantum processes in the brain as well as the relationship between (quantum) physics and consciousness.

On the second day of *The Large, the Small and the Human Mind – Part 2*, Roger Penrose will present his thesis of a cyclic universe – likewise for the first time in Switzerland – that has been hotly disputed on internet forums, in publications and panel discussions for quite some time now. It is the intention of the Swiss Biennial together with renowned scientists from Armenia, Canada, England, France, Hungary, India, Switzerland and the USA, not only to make possible the public discussion about the foundations and the future of quantum- and astrophysics, cosmology and the coming into being of consciousness. It also provides a space for questions that are related to the boundaries of our knowledge and of human imagination. The Lucerne conference brings the two themes consciousness and cosmology deliberately together in talks and panel discussions in order to critically investigate the knowledge of the natural sciences as well as epistemological borderlines.

**Dr. phil. René Stettler**  
Founder of the Swiss  
Biennial on Science,  
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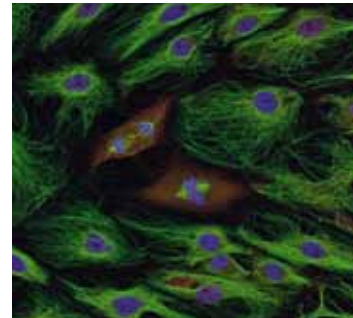


Abb. 3 – Fig. 3: A culture of HeLa cancer cells in different stages of the cell cycle with microtubules fluorescently labelled in green.