

Oct. 16 (Fri.) 9:05-9:15

Introductory Remarks: Evolution as a double-edged sword

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The year 2009 is the bicentennial of Charles Darwin's birth. In addition, it is the bicentennial since Jean-Baptiste Lamarck published the book "Zoological Philosophy". It is, therefore, timely to coorganize the international and interdisciplinary symposium entitled "What is Evolution?" with Asia-Pacific Center for Theoretical Physics (APCTP) in Korea, International Institute for Advanced Studies at Kyoto, and Institute of Economic Research of the Kyoto University.

Indeed, we are very familiar with the dichotomy of 'yes' or 'no' with regard to any given statement but not the complementary relationship of 'yes' and 'no'. An understanding of this complementary relationship enables us to understand that seemingly irreconcilable views in general need not be contradictory. This provides a good guiding principle for addressing complex problems for which dichotomous answers of 'yes' or 'no' do not generally apply. Likewise, we have to consider evolution as multiphase dynamical processes involving Darwinian natural selection and Lamarckian inheritance of acquired character. Disease such as cancer and Alzheimer's Diseases can be viewed as microevolution at the cellular and intracellular level, respectively. This implies the double-edged sword of evolution itself.

In the present symposium, we will discuss the topic of "What is Evolution?" from many perspectives from molecules to human beings. Through the extensive discussion of this symposium, we hope to have advanced understanding of evolution, which must be real *evolution* of evolutionary concept.

Oct. 16 (Fri.) 9:30-10:20

A Darwinian Approach to Phantom Perceptions

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