



VI Escuela de Verano en Sistemas Complejos

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Abstract

Course
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Morphogenesis and biological age

An organism is a complex system made of organs, which are made of cells. The chronological age of an organism is not suitable to describe many internal dynamics of an organism like its circadian metabolism, its morphogenesis and its dysgenesis. A big challenge consists presently in defining a biological time through criteria coming from the cell cycle synchronization of the cells of an organ and from the hierarchical functioning of the organs of an organism.

We will give in this course the basis of the theory of biological age and show in what way it can be used for determining the lifespan of individuals in species.

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