Mutations in evolution algebras by means of isotopisms

Raúl Manuel Falcón Ganfornina

rafalgan@us.es Departamento de Matemática Aplicada. Universidad de Sevilla.

Any mutation of genotypes that occurs during the mitotic cell cycle in an eukaryotic cell can be algebraically represented by an isotopism of the evolution algebra that describes the genetic pattern of the inheritance process. This talk deals with the theory of isotopisms of non-associative algebras and, particularly, with the distribution of evolution algebras into isotopism classes in order to determine the spectrum of genetic patterns, up to mutation, that describe the mentioned inheritance process of a mitotic cell cycle.