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supercategory of variable molecular sets

Canonical name SupercategoryOfVariableMolecularSets

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Related topic ETAS

Related topic MolecularSetVariable Related topic MolecularSetTheory

Related topic SupercategoriesOfComplexSystems

Related topic ComplexSystemsBiology Related topic AbstractRelationalBiology

Defines msv-supercategory

Defines classes of molecular set variables and their chemical transformations with time

Definition 0.1. A supercategory of variable molecular sets (or molecular set variables), \S_{msv} is defined as the supercategory whose class of objects is the class of all possible variable molecular sets, msv's, (or molecular set variables), and whose class of morphisms is the class of all molecular transformations, η_t , of msv's.

Remark All such msv-supercategories are semantic interpretations of the ETAS axioms (syntax). This is a mathematical representation of chemical reaction systems in terms of molecular sets that vary with time (or msv's, and their transformations as a result of diffusion, collisions, and chemical reactions.

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