

e-cyanobacterium

A Web-based Platform for Systems Biology of Cyanobacteria

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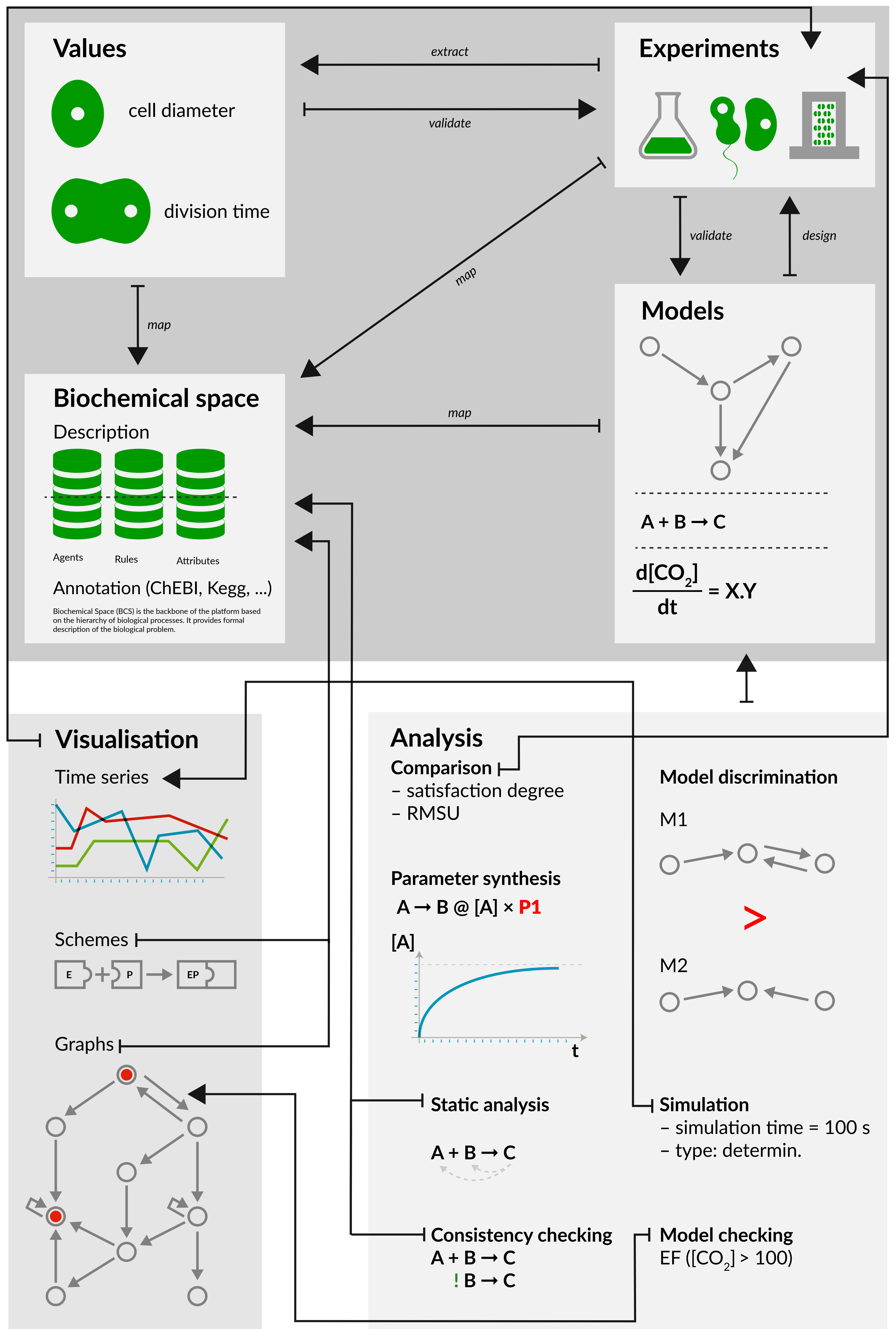
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Comprehensive Modelling Platform is a general framework for public sharing, annotation, and visualisation of domain-specific dynamical models and wet-lab experiments. The platform is unique in integrating abstract mathematical models with a precise consortium-agreed biochemical description provided in a rule-based formalism. The general aim is to stimulate collaboration between experimental and computational systems biologists to achieve better understanding of the domain-specific system.

e-cyanobacterium.org is an instance of Comprehensive Modelling Platform related to cyanobacteria. The framework is instantiated as a web-based application which allows to capture several aspects of biological models represented as biochemical reaction networks or ordinary differential equations.



Biochemical space (BCS) forms the backbone of the platform. It provides formal description of the biological problem and it is based on the hierarchy of

selected biological processes. For each process, there are presented relevant models, chemical entities, and rules formally specified in Biochemi-

cal Space Language. Presentation of every process includes detailed information and links to relevant internal and external sources.