

SNA - a toolbox for stoichiometric network analysis

Basic Information

System requirements

- PC-Linux.
- Mathematica 5.0 or higher.
 - A viewer for the notebooks as well as trial version of Mathematica can be downloaded from:
www.wolfram.com/products/mathreader,
www.wolfram.com/products/mathematica/trial.cgi.
- Only if one wants to recompile the installable MathLink binary: Matlab 6.5 .

Main Functions

- Construction and manipulation of metabolic networks.
- Calculation of a minimal generating set and enumeration of the elementary vectors for the flux and the conversion cone of scuh networks.
- Flux Balance Analysis.
- Computational geometry routines for polyhedral cones used for the above tasks.

Directory Structure

SNA/tutorials: Mathematica notebooks and a PDF providing a tutorial introduction to the toolbox.

SNA/mathcode: Mathematica source code of SNA.

SNA/pairelvs: The binaries and source code of the installable MathLink module.

SNA/matlab.sos: Required Matlab shared object libraries.

Documentation

The main documentation is in form of the above tutorials, a good starting point is [tutorials/tutorials.pdf](#). There is also the occasional README file and comment in the code.

Author

R. Urbanczik
Institute of Pharmacology, Univ. of Bern
email: urbanczik@physik.uni-wuerzburg.de

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