

# 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](http://www.wolfram.com/products/mathreader),  
[www.wolfram.com/products/mathematica/trial.cgi](http://www.wolfram.com/products/mathematica/trial.cgi).
- Only if one wants to recompile the installabe 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 installabe 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](mailto:urbanczik@physik.uni-wuerzburg.de)

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