## OpenDreamKit Glossary





Anaconda	distribution of scientific softwares
	https://www.continuum.io/
API	Application Programming Interface: specifications of communication protocols between software components
<b>⊗</b> binder	web-application for Jupyter notebook visualization from a github repository http://mybinder.org/
CAS	Computer Algebra System
Conda	package management system used in Anaconda
	https://conda.io/docs/
Cygwin	collection of tools which provide Linux functionalities on Windows
	https://www.cygwin.com
ython	optimising static compiler from Python to C
	http://cython.org
docker	software container platform (alternative to VM)
	https://www.docker.com
findstat	collaborative database for combinatorial statistics
	http://www.findstat.org/
flint	C library for number theory
	http://flintlib.org
(A)	CAS for discrete computational algebra
	https://www.gap-system.org
<b>♦</b> git	a version control system
	https://git-scm.com/
GitHub 🛒	website providing service based on gitlab
	https://github.com
gitlab	web-application for repository management based on git
<b>₩</b>	https://about.gitlab.com/
HPC	High Performance Computing
IPython	IPython is a command shell for interactive computing
IP[y]:	https://ipython.org
JOOMMF	Jupyter-OOMMF
	http://joommf.github.io
💢 Jupyter	web-application for interactive computations
	http://jupyter.org/
Jupyterhub	configurable multi-user Jupyter server
	https://jupyterhub.readthedocs.io
LinBox	exact linear algebra C++ library
	http://www.linalg.org
LMFDB	L-functions and Modular Forms Database: collaborative knowledge and
	data-base for number theory
	http://www.lmfdb.org/
MathHub	portal for active mathematical documents and formalizations
	https://mathhub.info

MMT	Meta-Meta-Tool: data/knowledge/software management framework based on OMDoc/MMT
MPIR	C library for multiprecision integer and rational arithmetic
	http://mpir.org
nbdime	notebook diffing and merging: Python library for version control for Jupyter
	notebooks
	https://github.com/jupyter/nbdime
nbval	Python library to test Jupyter notebooks
	https://github.com/computationalmodelling/nbval
NumPy	Python library for N-dimensional arrays and linear algebra
	https://www.numpy.org
OEIS	The On-Line Encyclopedia of Integer Sequences
	https://oeis.org/
OMDoc/MMT	Open Mathematical Documents / Meta Meta Theories: representation for-
	mat
	http://uniformal.github.io/doc/index.html
OOMMF	Object Oriented MicroMagnetic Framework
	http://math.nist.gov/oommf/
OpenMath	extensible standard for representing the semantics of mathematical objects
	http://openmath.org
OpenMP	Open Multi-Processing: API for parallel programming
PARIB	C library for number theory and command line interface
	https://pari.math.u-bordeaux.fr
python	programming language and interpreter
Python	https://www.python.org
Pythran	Python to C++ compiler for a subset of the Python language, with a focus
	on scientific computing
	https://pythonhosted.org/pythran
	CAS which aggregates dozens of other softwares and libraries such as
Ø 5DQE	FLINT, GAP, LinBox, MPIR, PARI/GP, Singular
	http://www.sagemath.org
Cooking.	software to create documentation
Sphinx (	http://www.sphinx-doc.org/en/stable/
SMC	SageMathCloud: web-appliction and website for collaborative work around
SIVIC	Sage, Jupyter, LaTeX,
	https://cloud.sagemath.com
SciPy	Python libraries for mathematics, science, and engineering
	https://scipy.org
SCSCP	Symbolic Computation Software Composability Protocol
SIMD	Single Instruction Multiple Data (in-core parallelism)
	CAS for commutative algebra and algebraic geometry
SINGULAR «	
	https://www.singular.uni-kl.de
SGE	(Sun) Grid Engine and derivatives: distributed resource manager and batch
	job scheduler for HPC clusters
	https://arc.liv.ac.uk/trac/SGE
VM	Virtual Machine: software that emulates a computer system inside an oper-
	ating system
VRE	Virtual Research Environment