OpenDreamKit Glossary





⊗ binder	web-application for jupy ter notebook visualization from a github repository		
	http://mybinder.org/		
CAS	(Computer Algebra System)		
gthon	optimising static compiler from Python to C		
	http://cython.org		
docker	software container platform (alternative to VM)		
	https://www.docker.com		
flint	C library for number theory		
	http://flintlib.org		
GA:	CAS for discrete computational algebra		
	https://www.gap-system.org		
♦ git	a version control system		
	https://git-scm.com/		
GitHub 🥌	website for collaborative software development based on git		
Gitriub T	https://github.com		
HPC	(High Performance Computing)		
IPython	IPython is a command shell for interactive computing,		
IP[y]:	mostly Python		
	https://ipython.org		
JOOMMF	(Jupyter-OOMMF)		
	http://joommf.github.io		
Jupyter	web-application for interactive computations		
	http://jupyter.org/		
Jupyterhub	configurable multi-user Jupyter		
	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 formaliza-		
	tions		
	https://mathhub.info		
MMT	(Meta-Meta-Tool) a framework used in OpenDreamKit for		
	modular representation of mathematical content		

MPIR	C library for multiprecision integer and rational. Fork of another project, GMP.		
	http://mpir.org		
nbdime	Python library for merging Jupyter notebooks		
поанне	https://github.com/jupyter/nbdime		
nbval	Python library to test Jupyter notebooks		
novai	https://github.com/computationalmodelling/nbval		
	Python library for multi-dimensional arrays and linear al-		
NumPy	gebra		
Nullii y	https://www.numpy.org		
OMD	(Open Mathematical Documents)		
OOMMF	(Object Oriented MicroMagnetic Framework)		
	http://math.nist.gov/oommf/		
	extensible standard for representing the semantics of math-		
${f OpenMath}$	ematical objects		
•	http://openmath.org		
a Dill	C library for number theory and command line interface		
PARIB	https://pari.math.u-bordeaux.fr		
python	programming language and interpreter		
e python	https://www.python.org		
Pythran	Python to C++ compiler for a subset of the Python lan-		
-9\	guage, with a focus on scientific computing		
	https://pythonhosted.org/pythran		
	CAS which aggregates dozens of other softwares and li-		
SDJE	braries such as FLINT, GAP, MPIR, PARI/GP, Singular		
	http://www.sagemath.org		
	web-appliction and website for collaborative work around		
SageMathCloud	Sage, Jupyter, LaTeX,		
	https://cloud.sagemath.com		
A - 1-	ecosystem of mathematical Python libraries (scipy, numpy		
SciPy	+ IPython $+$ sympy $+$ matplotlib $+$ pandas		
	https://scipy.org		
SCSCP	Symbolic Computation Software Composability Protocol		
SIMD	Single Instruction Multiple Data (in-core parallelism)		
SINGULAR «	CAS for commutative algebra and algebraic geometry		
SINGULAR W	https://www.singular.uni-kl.de		
$\overline{ m VM}$	(Virtual Machine) software that emulates a computer sys-		
V IVI	tem inside an operating system		
VRE	(Virtual Research Environment)		
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