

## CoCoALib - Issues

Estimated time: 189.02

#	Estimated time	Status	Subject	Tracker
1812		New	Documentation: indexXX.html should be recompiled if version has changed	Bug
1811		Feedback	Check include guards	Bug
1809	2.0	New	Make ex-syz.C	Feature
1808		In Progress	New constructor for PolyRing with elimination ordering	Feature
1807		New	Error codes: "Not..." for "blah must be ..." -- change prefix	Design
1801		In Progress	BuildInfo	Design
1800		In Progress	Conversion from SmallPrime to UNSIGNED long?	Design
1798		New	Computing in sub polyring	Design
1796		New	myFinalizeGBasis ("Final clean up") should be more flexible	Slug
1793		In Progress	Use ErrorContext instead of string FnName	Feature
1792		New	CpuTimeOut: arg of type ErrorContext?	Design
1787		In Progress	Iterator design: compatible with C++STL? Advancing beyond end?	Design
1782	4.0	New	Make CoCoALib test file for radical	Support
1778		In Progress	Homogenizer	Feature
1777		New	VerificationLevel: just 3? Low, high, guaranteed?	Design
1764		In Progress	Verbosity messages: avoid printing BIG values	Bug
1757		New	gcd(f,f) is slow	Slug
1756		In Progress	deg(f) is slow if f is long	Slug
1750		In Progress	IdealOfPoints: allow duplicate points?	Design
1748		New	July 2023	Feature
1744	40.0	In Progress	Implement GBMill (aka Groebner Framework)	Design
1743	4.0	New	Implement Truncated GBases for homogeneous input	Feature
1742	10.0	New	MinGens could be faster	Feature
1740	8.0	In Progress	MinGens gives non minimal gens *if some deg=0*	Bug
1738		New	Suggestion about Graded polynomial rings	Design
1737		In Progress	Homogenization of an ideal with ZZ^1-grading	Slug
1736		New	Clean TmpGOperations, and remove Tmp prefix	Design
1733		Resolved	FactorINT: funny order	Bug
1730		New	ApplySPRCodomain: relax power/exponent check	Bug
1727		New	Cruft in ExtLibs-Normaliz.C	Design

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1720		New	DivAlg in CoCoALib	Design
1719	4.25	Closed	FactorINT has got worse	Bug
1715		New	ProductBigInt (also ProductBigRat???)	Feature
1711	6.0	Feedback	Development releases?	Support
1705		In Progress	ProgressReporter: prepare for new loop?	Bug
1704		New	Symlink directory for external files needed by CoCoA-5	Design
1703		Resolved	Threaddafety, multithreading: optional fn arg (or separate fn)	Design
1699		In Progress	Shell scripts: Shebang line, etc	Design
1685		In Progress	RingBase::mySwap needed?	Design
1683		New	Islrred in ZZ[x,y]	Bug
1678		In Progress	Unsigned long for indexes (& sizes?)	Design
1677		In Progress	release-source script: use shell globbing?	Design
1673		New	Review examples	Support
1670		New	Build also dynamic/shared library for CoCoALib?	Feature
1669		New	Review File subtree hierarchy	Design
1668		New	Generalize prim	Feature
1667		In Progress	GBasis over ZZ: port to CoCoALib	Feature
1665		New	Compilation on Windows: problems for normaliz	Support
1664		New	geobucket: documentation	Support
1662		Resolved	txt2tags: problem with filenames containing "_" or "-"	Bug
1657		New	Improve CertifyNotPower	Feature
1643		New	rref slower than expected (maybe) [[reduced row echelon form]]	Slug
1642		In Progress	interreduce: make monic if over finite field?	Design
1635		In Progress	NR for polys with coeffs in PID	Feature
1628		In Progress	Unused variables, params, data members	Design
1611		New	Documentation for PrimaryDecomposition	Support
1609		New	Clean time.C	Support
1600		In Progress	Detect updated versions of external libs	Bug
1576		In Progress	cmp for machine integers	Design
1575		New	DynamicBitset missing arg checks	Bug
1572		Resolved	Use noexcept	Design
1571		New	ker_H needs care	Bug
1562		New	matrix.H and MatrixView.H	Design

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1561		New	Doc for module term orderings	Support
1559		In Progress	Default ctor for rings	Feature
1542		In Progress	gfan does not "deinitialize"	Bug
1521		New	Unexpectedly slow example with larger types for SmallExponent_t	Slug
1513		New	Better test for univariate-ness (and better conversion)	Feature
1510		New	Documentation for SparsePolyOps?	Support
1497		New	Doc for normaliz fns	Support
1485		New	Simple syntax for making a quotient ring?	Feature
1465		In Progress	mul(MAT,MAT,MAT)	Design
1464		New	What is the difference between InterruptReceived and InterruptedBySignal	Design
1446		In Progress	Start using C++14 "move" capability	Design
1444		New	HNF: Hermite Normal Form	Feature
1428		New	DenseMatrix: use template impl for ctors from vec-vec?	Design
1422		In Progress	Remove flag lhaveGBasisValue?	Design
1417	6.0	In Progress	RadicalZeroDim with extra parameter for GBasis timeout	Feature
1414		In Progress	Make class RingElemVector?	Design
1394		Resolved	Oddly slow GBasis computation (slow final cleanup)	Slug
1388		New	GlobalManager: create SignalWatcher internally?	Feature
1381		In Progress	Type ideal for ZZ[x[1..n]]	Feature
1370		New	RingID counter increased inside some functions	Design
1355		New	TmpLDP uses srand and time	Design
1349		In Progress	ideal ctor where given gens are a gbasis	Feature
1346		In Progress	C++14: use the new for loop syntax where appropriate (like cocoa's foreach)	Design
1337		In Progress	PrimaryDecomposition: a interesting/pathological example	Slug
1306		In Progress	exgcd over integers (ZZ)	Feature
1281		New	Factor of multivariate sometimes prints ERROR	Bug
1280		In Progress	Determinant & Inverse of matrix over non integral domain	Bug
1263		Resolved	Tidy CoCoALib test directory	Support
1255		New	Ideals with trivial GBasis	Design
1254		New	New function: MinPoly for pseudo-zero-dimensional ideals	Feature
1242		In Progress	C++14: Use type auto where appropriate	Design
1233		Resolved	factor SEGV -- too large characteristic	Bug
1219		In Progress	Frobby version number	Feature

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1218	1.95	Closed	32-bit or 64-bit preprocessor macro?	Feature
1207	5.0	New	New function: SubmoduleOfGBasis	Feature
1197		In Progress	IsZeroDet: new fn	Feature
1193		New	Naming convention mistakes	Support
1179		In Progress	Clean up SparsePolyOps-MonomialIdeals	Design
1176		In Progress	interval arithmetic	Feature
1132		New	Canonical homomorphism for (some) polynomial rings?	Feature
1125		New	Separate install script for CoCoALib?	Design
1118		In Progress	SLUG: factorization of $x^{9999}$	Slug
1106	0.1	Closed	Remove READLINE from CoCoALib	Design
1094	30.0	In Progress	Revive code for SelfSaturating GBasis	Feature
1057	8.0	In Progress	Slug: Polynomial ring constructor slow with (big) matrix ordering	Slug
967	5.0	Resolved	Improve saturate	Slug
958	3.0	Resolved	New function: multiplicity and dim	Feature
947		In Progress	IsRadical for ideal?	Feature
934	3.0	In Progress	MachineInt: change semantics?	Design
933		In Progress	Separate configure scripts for CoCoALib and CoCoA-5	Design
925		In Progress	MachineInt or long for args which are indices (yet again)	Design
924		New	FlagManager for bool/bool3 flags	Design
898		In Progress	New function: cardinality of finite field?	Feature
894		In Progress	strict enum types: C++11 extension	Design
872		In Progress	LinSolve for matrices over FFp	Feature
871		New	Redesign ideals	Design
866	20.0	In Progress	implicit, ImplicitHypersurface: improve output verification	Slug
849		In Progress	Cleanup MinPoly code	Design
813	3.0	Feedback	Implement "elim" in CoCoALib	Feature
802		In Progress	DivMask: extend interface?	Feature
801		New	Test whether a symbol is in a ring	Feature
777		In Progress	SLUG: elimination	Slug
743		In Progress	Better errors: give supplementary info about the error	Feature
718	2.22	Closed	Insert calls to CheckForInterrupt	Feature
710		In Progress	Update normaliz interface?	Design
707	8.0	In Progress	MatrixOrderingMod32749Impl: test and write documentation!	Design

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680		Resolved	DistrMPolyClean does not use MemPool for summands?	Bug
664		Resolved	Impl small non-prime finite fields (using logs)	Feature
601		In Progress	LongRange: in which file should it be declared/defined?	Design
598		In Progress	Syzygy for modules: non-homogeneous module	Feature
582	3.0	New	Error codes: use same code for "not poly ring" and "not elem poly ring"	Design
313		In Progress	Elim(vector<long>) as PPOrderingCtor	Feature
308	2.0	In Progress	Error: ERR::NotNonZero instead of ERR::ZeroRingElem?	Design
262		New	Play with GIT	Support
222	10.5	In Progress	Printing polynomials - spaces between terms	Feature
206		In Progress	Matrix equation solving: LinKer	Feature
142		In Progress	Improve threadsafety	Feature
125		In Progress	Matrix equation solving; linear system solving	Feature