

## CoCoALib - Issues

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
1815	CoCoALib		Normal	JSON and UUID		02 May 2024 19:58	New Function	10
1814	CoCoALib		Normal	Ensure tests do not need too much RAM		23 Apr 2024 22:14	Safety	30
1813	CoCoALib		Normal	Some tests have become slower		07 Apr 2024 21:53	Safety	10
1812	CoCoALib		Normal	Documentation: indexXX.html should be recompiled if version has changed		29 Mar 2024 10:37	Documentation	0
1811	CoCoALib		Normal	Check include guards	John Abbott	22 Apr 2024 20:15	Tidying	90
1810	CoCoALib		Normal	Release CoCoALib 0.99900		29 Mar 2024 09:00	Various	0
1809	CoCoALib		Normal	Make ex-syz.C	Anna Maria Bigatti	28 Mar 2024 08:45	Documentation	10
1808	CoCoALib		Normal	New constructor for PolyRing with elimination ordering	Anna Maria Bigatti	28 Mar 2024 07:35	New Function	10
1807	CoCoALib		Normal	Error codes: "Not..." for "blah must be ..." -- change prefix		26 Mar 2024 14:22	Renaming	0
1804	CoCoALib		Normal	Use long long (at least sometimes)?	John Abbott	26 Apr 2024 21:09	Portability	80
1803	CoCoALib		Normal	Improve trivial operations with ideal whose GBasis is [1]	Anna Maria Bigatti	25 Mar 2024 19:06		0
1802	CoCoALib		Normal	Tidying ideal generators (for non-polynomial ideals)		25 Mar 2024 19:05	Improving	0
1801	CoCoALib		Normal	BuildInfo		13 Apr 2024 22:18	Tidying	10
1800	CoCoALib		Normal	Conversion from SmallPrime to UNSIGNED long?		15 Apr 2024 10:09	Tidying	10
1799	CoCoALib		Normal	Clean out OLD CODE?		24 Mar 2024 10:52	Tidying	0
1798	CoCoALib		Normal	Computing in sub polyring		22 Mar 2024 09:30	Improving	0
1797	CoCoALib		Normal	Add a function CleanupGens making some easy cleaning on the generators?		25 Mar 2024 19:16	New Function	0
1796	CoCoALib		Normal	myFinalizeGBasis ("Final clean up") should be more flexible	Anna Maria Bigatti	22 Mar 2024 16:19	Improving	30
1793	CoCoALib		Normal	Use ErrorContext instead of string FnName		26 Mar 2024 11:50	Improving	60
1792	CoCoALib		Normal	CpuTimeOut: arg of type ErrorContext?		18 Mar 2024 20:50	Tidying	0
1787	CoCoALib		Normal	Iterator design: compatible with C++STL? Advancing beyond end?	John Abbott	23 Apr 2024 22:26	Tidying	30
1786	CoCoALib		Normal	Add new function for IsInRadical for monomial ideals? (RadicalMembership)	Anna Maria Bigatti	01 Mar 2024 18:37	Improving	10
1785	CoCoALib		Normal	Add function IsHomog3(l)?		01 Mar 2024 14:53	New Function	0
1784	CoCoALib		Normal	Add flag IhaveHomogGensValue for ideals in SparsePolyRing?		01 Mar 2024 14:36	Data Structures	0
1783	CoCoALib		Normal	Code & doc structure: one-big-file or many-small-files?		24 Feb 2024 18:34	Tidying	10
1782	CoCoALib		Normal	Make CoCoALib test file for radical	Anna Maria Bigatti	01 Mar 2024 09:44	Tidying	0
1778	CoCoALib		Normal	Homogenizer		25 Apr 2024 21:54	New Function	10

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1777	CoCoALib		Normal	VerificationLevel: just 3? Low, high, guaranteed?		16 Feb 2024 10:00	Various	0
1775	CoCoALib		Normal	CoCoALib releases on redmine	Anna Maria Bigatti	12 Jan 2024 13:29	Documentation	70
1767	CoCoALib		Normal	Finalize design for ideals in CoCoALib		08 Mar 2024 17:26	Data Structures	10
1757	CoCoALib		Normal	gcd(f,f) is slow		16 Feb 2024 09:57	Improving	0
1756	CoCoALib		Normal	deg(f) is slow if f is long	John Abbott	21 Mar 2024 20:40	Improving	50
1750	CoCoALib		Normal	IdealOfPoints: allow duplicate points?	John Abbott	08 Mar 2024 18:23	Improving	20
1748	CoCoALib		Normal	July 2023	John Abbott	08 Mar 2024 08:29	Various	0
1744	CoCoALib		Normal	Implement GBMill (aka Groebner Framework)	Anna Maria Bigatti	25 May 2023 14:30	Data Structures	10
1743	CoCoALib		Normal	Implement Truncated GBases for homogeneous input	Anna Maria Bigatti	19 May 2023 15:42	New Function	0
1742	CoCoALib		Normal	MinGens could be faster	Anna Maria Bigatti	18 May 2023 13:44	Improving	10
1738	CoCoALib		Normal	Suggestion about Graded polynomial rings		05 May 2023 08:47	Data Structures	10
1737	CoCoALib		Normal	Homogenization of an ideal with $\mathbb{Z}^1$ -grading	Anna Maria Bigatti	01 Feb 2024 19:59	Improving	20
1736	CoCoALib		Normal	Clean TmpGOperations, and remove Tmp prefix		28 Apr 2023 16:01	Tidying	0
1730	CoCoALib		Normal	ApplySPRCodomain: relax power/exponent check		27 Nov 2023 20:30	Improving	0
1727	CoCoALib		Normal	Cruft in ExtLibs-Normaliz.C		13 Mar 2023 19:01	Tidying	0
1720	CoCoALib		Normal	DivAlg in CoCoALib	Anna Maria Bigatti	25 Mar 2024 17:55	Tidying	20
1711	CoCoALib		Normal	Development releases?	Anna Maria Bigatti	09 Mar 2023 20:56	Various	90
1706	CoCoALib		Normal	slimgb: Brickenstein, singular		30 Oct 2022 20:30	Improving	0
1705	CoCoALib		Normal	ProgressReporter: prepare for new loop?	John Abbott	25 Apr 2024 21:40	Improving	80
1704	CoCoALib		Normal	Symlink directory for external files needed by CoCoA-5	Anna Maria Bigatti	18 Mar 2024 09:29	Tidying	0
1703	CoCoALib		Normal	Threadsaafety, multithreading: optional fn arg (or separate fn)	John Abbott	07 Mar 2024 20:04	Safety	80
1699	CoCoALib		Normal	Shell scripts: Shebang line, etc		16 Feb 2024 10:01	Portability	10
1692	CoCoALib		Normal	Suggestion: Add "JumpTo" function to prime iterators		15 Feb 2024 22:39	Improving	10
1691	CoCoALib		Normal	Random and threadsafe?		15 Feb 2024 22:38	Safety	0
1687	CoCoALib		Normal	Release CoCoALib 0.99850	Anna Maria Bigatti	29 Mar 2024 10:42	Various	50
1685	CoCoALib		Normal	RingBase::mySwap needed?		07 Mar 2024 20:49	Improving	10

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1682	CoCoALib		Normal	swap for new classes		16 Feb 2024 09:35	Improving	10
1678	CoCoALib		Normal	Unsigned long for indexes (& sizes?)		07 Mar 2024 20:25	Safety	10
1677	CoCoALib		Normal	release-source script: use shell globbing?		16 Feb 2024 10:01	Tidying	10
1673	CoCoALib		Normal	Review examples		08 Mar 2023 19:45	Documentation	0
1672	CoCoALib		Normal	Documentation: a good model to follow?		16 Feb 2024 09:33	Documentation	0
1670	CoCoALib		Normal	Build also dynamic/shared library for CoCoALib?		07 Mar 2024 21:33	Portability	0
1669	CoCoALib		Normal	Review File subtree hierarchy		08 Mar 2023 19:56	Tidying	0
1668	CoCoALib		Normal	Generalize prim		31 Jan 2024 22:03	Improving	0
1666	CoCoALib		Normal	MachineInt: chase through ULL changes		16 Apr 2024 22:40	Tidying	10
1665	CoCoALib		Normal	Compilation on Windows: problems for normaliz	Anna Maria Bigatti	18 Mar 2024 09:27	Documentation	0
1664	CoCoALib		Normal	geobucket: documentation		08 Mar 2023 19:44	Documentation	0
1662	CoCoALib		Normal	txt2tags: problem with filenames containing "_" or "-"	Anna Maria Bigatti	09 Apr 2024 14:21	Documentation	80
1657	CoCoALib		Normal	Improve CertifyNotPower		31 Jan 2024 22:03	Improving	0
1654	CoCoALib		Normal	New function IsInSymbols		12 May 2023 08:03		0
1645	CoCoALib		Normal	Implement monic0(f) for the case monic(0)?		16 Feb 2024 09:38	Improving	10
1643	CoCoALib		Normal	rref slower than expected (maybe) [[reduced row echelon form]]		01 Mar 2024 09:54	Improving	0
1642	CoCoALib		Normal	interreduce: make monic if over finite field?	John Abbott	16 Feb 2024 20:44	Improving	20
1635	CoCoALib		Normal	NR for polys with coeffs in PID		16 Feb 2024 09:39	New Function	10
1632	CoCoALib		Normal	C++17: notes about updating		12 Nov 2021 18:11	Portability	0
1630	CoCoALib		Normal	Signal handler not portable?		15 Feb 2024 22:42	Portability	0
1628	CoCoALib		Normal	Unused variables, params, data members		11 Mar 2023 12:29	Tidying	10
1620	CoCoALib		Normal	MinPolyQuot not documented		15 Oct 2021 14:24		0
1611	CoCoALib		Normal	Documentation for PrimaryDecomposition		16 Feb 2024 09:42	Documentation	0
1607	CoCoALib		Normal	Coding guidelines		16 Feb 2024 10:02	Documentation	0
1600	CoCoALib		Normal	Detect updated versions of external libs		16 Feb 2024 10:02	Safety	10
1584	CoCoALib		Normal	Benchmarks?		08 Mar 2023 19:41	Documentation	0
1582	CoCoALib		Normal	Factorization in $K(a,b)[x,y]$		07 Mar 2024 20:23	Improving	0
1576	CoCoALib		Normal	cmp for machine integers	John Abbott	21 Jan 2024 20:23	Improving	20
1575	CoCoALib		Normal	DynamicBitset missing arg checks	Anna Maria Bigatti	16 Feb 2024 09:46	Safety	0
1572	CoCoALib		Normal	Use noexcept	John Abbott	23 Apr 2024 21:57	Improving	70

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
1571	CoCoALib		Normal	ker_H needs care	Anna Maria Bigatti	16 Feb 2024 17:49	Maths Bugs	10
1562	CoCoALib		Normal	matrix.H and MatrixView.H		08 Mar 2023 19:56	Tidying	0
1559	CoCoALib		Normal	Default ctor for rings		13 Mar 2024 20:42	Improving	10
1542	CoCoALib		Normal	gfan does not "deinitialize"		08 Mar 2023 19:53	Various	30
1532	CoCoALib		Normal	Convenient RingHom pseudo-ctors		07 Mar 2024 21:34	New Function	10
1521	CoCoALib		Normal	Unexpectedly slow example with larger types for SmallExponent_t		08 Mar 2023 19:54	Various	0
1518	CoCoALib		Normal	SLUG: Printing PPs with many indets		15 Feb 2024 22:45	Improving	20
1513	CoCoALib		Normal	Better test for univariate-ness (and better conversion)		16 Mar 2024 21:38	Improving	0
1510	CoCoALib		Normal	Documentation for SparsePolyOps?		18 Mar 2024 09:45	Documentation	30
1497	CoCoALib		Normal	Doc for normaliz fns		08 Mar 2023 19:40	Documentation	0
1491	CoCoALib		Normal	Unified Gaussian reduction impl		08 Mar 2023 19:55	Tidying	0
1485	CoCoALib		Normal	Simple syntax for making a quotient ring?		08 Mar 2023 19:51	Improving	0
1482	CoCoALib		Normal	Extended rationals: PlusInfinity and MinusInfinity		16 Feb 2024 18:02	New Function	10
1470	CoCoALib		Normal	Get indexed indets from a polyring		07 Mar 2024 20:36	New Function	0
1468	CoCoALib		Normal	Adjoin indets to a poly ring		15 Feb 2024 22:45	New Function	10
1465	CoCoALib		Normal	mul(MAT,MAT,MAT)		16 Feb 2024 10:04	Tidying	10
1464	CoCoALib		Normal	What is the difference between InterruptReceived and InterruptedBySignal		01 Mar 2024 09:54	Tidying	0
1446	CoCoALib		Normal	Start using C++14 "move" capability		08 Mar 2024 18:00	Improving	10
1444	CoCoALib		Normal	HNF: Hermite Normal Form		16 Feb 2024 09:53	New Function	0
1441	CoCoALib		Normal	GFan: port CoCoA_5 functions into CoCoALib	Anna Maria Bigatti	16 Feb 2024 17:54	New Function	0
1437	CoCoALib		Normal	Filling matrix row/col from a vector		15 Feb 2024 22:46	New Function	0
1433	CoCoALib		Normal	HilbertDriven Buchberger Algorithm	Anna Maria Bigatti	16 Feb 2024 18:02	New Function	0
1428	CoCoALib		Normal	DenseMatrix: use template impl for ctors from vec-vec?		07 Mar 2024 20:49	Tidying	0
1422	CoCoALib		Normal	Remove flag lhaveGBasisValue?	Anna Maria Bigatti	16 Feb 2024 17:56	Data Structures	10
1417	CoCoALib		Normal	RadicalZeroDim with extra parameter for GBasis timeout	Anna Maria Bigatti	16 Mar 2024 21:42	Improving	20
1388	CoCoALib		Normal	GlobalManager: create SignalWatcher internally?		01 Mar 2024 09:49	Safety	0
1381	CoCoALib		Normal	Type ideal for ZZ[x[1..n]]		16 Feb 2024 09:47	Data Structures	10
1378	CoCoALib		Normal	Create two separate radical fns (for 0-dim ideals)		03 Jul 2023 17:49	Improving	0
1359	CoCoALib		Normal	gcd: low degree but big coeffs can be slow		30 Oct 2019 22:23	Improving	0

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1355	CoCoALib		Normal	TmpLDP uses srand and time		01 Mar 2024 09:50	Tidying	0
1349	CoCoALib		Normal	ideal ctor where given gens are a gbasis		16 Feb 2024 09:52	Improving	10
1346	CoCoALib		Normal	C++14: use the new for loop syntax where appropriate (like cocoa's foreach)		22 Apr 2024 21:08	Improving	80
1339	CoCoALib		Normal	All PPs of given wdeg		16 Oct 2019 14:04	New Function	0
1337	CoCoALib		Normal	PrimaryDecomposition: a interesting/pathological example	Anna Maria Bigatti	08 Mar 2023 21:13	Improving	10
1324	CoCoALib		Normal	Improve RootBound		30 Oct 2019 21:44	Improving	10
1323	CoCoALib		Normal	Improve RealRoots: compute sqfr decomp		30 Sep 2019 16:14	Improving	0
1306	CoCoALib		Normal	exgcd over integers (ZZ)		08 Mar 2024 17:57	New Function	20
1282	CoCoALib		Normal	subresultant		08 Mar 2024 17:54	New Function	20
1278	CoCoALib		Normal	Port old "clever" code for matrix determinant over ZZ to CoCoALib		03 May 2019 11:42	New Function	0
1269	CoCoALib		Normal	Ideal Ops: sort-cuts for trivial args?		04 Apr 2019 15:07	Improving	0
1267	CoCoALib		Normal	Ideal equality		09 Apr 2019 17:48	Improving	10
1266	CoCoALib		Normal	Make a poly ring QQ[x,y,z] also contain a ZZ[x,y,z]		28 Mar 2019 16:42	Improving	0
1263	CoCoALib		Normal	Tidy CoCoALib test directory	John Abbott	07 Mar 2023 20:49	Tidying	80
1255	CoCoALib		Normal	Ideals with trivial GBasis		08 Mar 2023 19:49	Improving	0
1254	CoCoALib		Normal	New function: MinPoly for pseudo-zero-dimensional ideals	Anna Maria Bigatti	07 Mar 2024 20:25	New Function	0
1242	CoCoALib		Normal	C++14: Use type auto where appropriate		22 Apr 2024 21:08	Tidying	40
1227	CoCoALib		Normal	exgcd; solve Bezout equation		29 Aug 2019 14:55	New Function	0
1219	CoCoALib		Normal	Frobby version number		08 Mar 2023 19:40	Documentation	10
1213	CoCoALib		Normal	Create PolyOps-RingElem?		16 Feb 2024 09:48	Tidying	0
1208	CoCoALib		Normal	New function: Threadsafe RandomLinearForm (CoCoALib)		01 Oct 2019 11:28	Safety	0
1207	CoCoALib		Normal	New function: SubmoduleOfGBasis		18 Mar 2024 09:33	New Function	0
1198	CoCoALib		Normal	Non-standard DegRevLex (NonStdDegRevLex, WDegRevLex)		23 Sep 2019 12:44	New Function	0
1197	CoCoALib		Normal	IsZeroDet: new fn	John Abbott	08 Mar 2024 17:58	New Function	40
1187	CoCoALib		Normal	Matrix rank is slow (over QQ)		26 Jun 2018 11:29	Improving	0
1179	CoCoALib		Normal	Clean up SparsePolyOps-MonomialIdeals	Anna Maria Bigatti	22 Mar 2024 09:33	Tidying	20
1176	CoCoALib		Normal	interval arithmetic	John Abbott	10 Mar 2023 17:46	New Function	50
1173	CoCoALib		Normal	Upper bound for value of poly in an interval		04 Apr 2018 11:55	New Function	0
1168	CoCoALib		Normal	ideal: does const ourGetPtr really need to be private?		08 Mar 2024 17:26	Data Structures	40
1160	CoCoALib		Normal	Clean up revised RatReconstructByContFrac code	John Abbott	26 Feb 2019 16:33	Tidying	0

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1156	CoCoALib		Normal	Printing for RingElem		08 Jan 2020 23:02	Improving	0
1150	CoCoALib		Normal	New fn: transform ideal with ring hom		22 Jun 2020 10:34	New Function	0
1147	CoCoALib		Normal	mySquare and myPowerSmallExp		30 Apr 2019 17:18	Tidying	0
1134	CoCoALib		Normal	Organize better the documentation for CoCoALib		09 Apr 2019 10:50	Documentation	0
1132	CoCoALib		Normal	Canonical homomorphism for (some) polynomial rings?	Anna Maria Bigatti	08 Mar 2024 18:01	New Function	0
1130	CoCoALib		Normal	SqFreeFactor: should it work over ZZ?		05 Apr 2019 15:39	Improving	10
1125	CoCoALib		Normal	Separate install script for CoCoALib?	John Abbott	23 Jan 2024 21:54	Tidying	0
1117	CoCoALib		Normal	Better printing of negative coeffs		23 Sep 2019 11:52	Improving	10
1115	CoCoALib		Normal	New class: exterior algebra	John Abbott	31 Jan 2024 21:59	Data Structures	20
1103	CoCoALib		Normal	Pseudo-zero-dim ideals	Anna Maria Bigatti	05 Nov 2021 16:09	Improving	30
1098	CoCoALib		Normal	Ctors for exceptions/errors		06 Sep 2017 15:27	Tidying	0
1094	CoCoALib		Normal	Revive code for SelfSaturating GBasis	Anna Maria Bigatti	22 Mar 2024 14:38	New Function	50
1089	CoCoALib		Normal	invalid pointer in "free"	John Abbott	20 Jul 2017 13:06	Various	10
1070	CoCoALib		Normal	Slug: MakeTermOrd (rk calls in RemoveRedundantRows)	Anna Maria Bigatti	17 May 2017 13:47	Improving	10
1069	CoCoALib		Normal	GroebnerFan: ERROR: Matrix must be invertible		17 Dec 2018 15:16	Improving	10
1066	CoCoALib		Normal	Documentation: translation table	Anna Maria Bigatti	08 Mar 2024 18:16	Documentation	30
1059	CoCoALib		Normal	Printing ring for ideals (or just for ideals 0 and 1)		05 May 2017 16:58	Improving	10
1026	CoCoALib		Normal	JanetBasis gives error indet index out of range		08 Mar 2017 15:26	Maths Bugs	0
1022	CoCoALib		Normal	New "LF" function which is based on StdDeg		06 Mar 2017 19:37	New Function	20
1013	CoCoALib		Normal	GlobalManager: name of object in examples (and tests)		25 Feb 2017 11:11	Renaming	10
1001	CoCoALib		Normal	CoCoALib: ideas for student projects		18 Feb 2022 16:57	New Function	10
992	CoCoALib		Normal	Poly ring homomorphism to change ordering		13 Dec 2016 18:04	New Function	0
987	CoCoALib		Normal	GCD: add special case if args are monomials		28 Nov 2016 22:04	Improving	0
974	CoCoALib		Normal	QIR/RealRootRefine: improve behaviour if input interval has "nasty" endpoints		01 Mar 2021 21:25	Improving	10
972	CoCoALib		Normal	ex-PolyIterator		17 Nov 2016 13:21	Documentation	0
970	CoCoALib		Normal	Weights in ElimMat?		11 Nov 2016 15:49	Improving	10
968	CoCoALib		Normal	Slow NF example		10 Nov 2016 21:33	Improving	10
967	CoCoALib		Normal	Improve saturate	Anna Maria Bigatti	22 Mar 2024 10:18	Improving	70

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958	CoCoALib		Normal	New function: multiplicity and dim	Anna Maria Bigatti	08 Mar 2024 18:15	New Function	80
949	CoCoALib		Normal	New function: IdealWithIncrementalGBasis(l, f)	Anna Maria Bigatti	16 Feb 2024 18:03	New Function	0
947	CoCoALib		Normal	IsRadical for ideal?		23 Jan 2024 22:13	New Function	10
942	CoCoALib		Normal	Which names to use? Intersection/saturation vs intersect/saturate		22 Mar 2024 10:20	Renaming	20
937	CoCoALib		Normal	LinDepMill: Mill for linear dependencies	Anna Maria Bigatti	18 Apr 2024 16:38	New Function	10
934	CoCoALib		Normal	MachineInt: change semantics?		22 Apr 2024 21:32	Safety	30
933	CoCoALib		Normal	Separate configure scripts for CoCoALib and CoCoA-5	John Abbott	23 Jan 2024 21:52	Portability	10
925	CoCoALib		Normal	MachineInt or long for args which are indices (yet again)		16 Apr 2024 22:29	Safety	50
924	CoCoALib		Normal	FlagManager for bool/bool3 flags	Anna Maria Bigatti	16 Feb 2024 17:57	Data Structures	50
923	CoCoALib		Normal	Fn to read symbol range (SymbolRange)		16 Sep 2016 15:04	New Function	0
921	CoCoALib		Normal	Design GBMill		22 May 2017 14:11		0
919	CoCoALib		Normal	Hilbert Driven GBasis		22 May 2017 14:11		0
914	CoCoALib		Normal	New function: quorem for univariate polynomials?		22 Aug 2016 16:45	New Function	0
913	CoCoALib		Normal	Read input from SymbolicData database	Anna Maria Bigatti	02 Aug 2016 10:55	New Function	0
906	CoCoALib		Normal	External libraries: keep copy of compatible versions?		13 Jul 2016 11:19	Portability	0
904	CoCoALib		Normal	SmallFpDouble: which impl of InvMod to use?		04 Jul 2016 13:45	Improving	0
896	CoCoALib		Normal	myIsEqual, myCmp: direct comparisons between RingElem and MachineInt, BigInt and BigRat?		25 Jun 2018 15:31	Improving	10
894	CoCoALib		Normal	strict enum types: C++11 extension	John Abbott	25 Apr 2024 21:49	Safety	30
885	CoCoALib		Normal	IsIrred3: fast 3-way irred test (returning bool3)		30 Apr 2019 17:19	New Function	10
884	CoCoALib		Normal	DistrMPolyInIPP::myPushFront and DistrMPolyInIPP::myPushBack inefficient if arg is a PP		24 May 2016 15:25	Improving	0
882	CoCoALib		Normal	Impl faster multiplication for DUP (dense univariate polys)		09 May 2016 22:10	Improving	0
874	CoCoALib		Normal	factor: too slow on largish multivariate poly	John Abbott	26 Feb 2019 16:29	Improving	20
873	CoCoALib		Normal	bool3: add some logical operations?		21 Jun 2016 14:37	New Function	10
871	CoCoALib		Normal	Redesign ideals		31 Oct 2023 11:24	Data Structures	0
869	CoCoALib		Normal	SmallFpImpl: different repr for computation and for storage?		22 Apr 2016 15:14	Improving	0
866	CoCoALib		Normal	implicit, ImplicitHypersurface: improve output verification		22 Mar 2024 09:43	Tidying	20
849	CoCoALib		Normal	Cleanup MinPoly code	Anna Maria Bigatti	08 Mar 2024 18:15	Tidying	10

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846	CoCoALib		Normal	IsIrred: correct design?	John Abbott	26 Feb 2019 16:32	Improving	20
842	CoCoALib		Normal	PPMonoidSparse: comparisons are VERY SLOW		15 Feb 2016 13:57	Improving	0
841	CoCoALib		Normal	NewPolyRing: tidy up the many different versions		01 Sep 2017 11:30	Tidying	10
840	CoCoALib		Normal	GINV: alex basis		31 Mar 2016 13:05	New Function	10
838	CoCoALib		Normal	Differential algebra		24 Oct 2016 15:32	New Function	10
837	CoCoALib		Normal	factor is very slow on some simple input polynomials		06 Jan 2016 14:40	Improving	0
835	CoCoALib		Normal	Make Mario's new code threadsafe		09 Dec 2015 16:48	Safety	0
828	CoCoALib		Normal	MachineInt: function for checking that value is greater than some lower limit (and below MAXLONG)	John Abbott	15 Apr 2024 10:08	New Function	20
826	CoCoALib		Normal	Sparse matrices		02 Dec 2015 18:24	Data Structures	0
818	CoCoALib		Normal	F5 with 3 args?	John Abbott	24 Nov 2015 10:11	Tidying	10
812	CoCoALib		Normal	PPMonoid pseudo-ctor without explicit ordering		24 Nov 2015 18:16	New Function	0
809	CoCoALib		Normal	FastCmp for degree -- useful?	Anna Maria Bigatti	27 Nov 2015 16:06	Tidying	0
808	CoCoALib		Normal	Alg Extn by non-zero dim ideal		18 Nov 2015 23:29	Tidying	0
803	CoCoALib		Normal	PPOrdering: use it to compute WDeg?		06 Nov 2017 14:00	New Function	10
801	CoCoALib		Normal	Test whether a symbol is in a ring		07 Mar 2024 21:36	New Function	0
797	CoCoALib		Normal	SmallFpImpl: make it faster	John Abbott	24 Apr 2024 23:04	Improving	20
791	CoCoALib		Normal	Clean code for DistrMPolyClean	Anna Maria Bigatti	02 Nov 2015 22:13	Tidying	0
788	CoCoALib		Normal	No doc for DistrMPolyInIFpPP		22 Oct 2015 13:49	Documentation	0
787	CoCoALib		Normal	Remove refcounts from RingElem?		19 Oct 2015 17:08	Safety	0
785	CoCoALib		Normal	finite fields: global register of fields already created?		15 Oct 2015 17:27	Improving	0
784	CoCoALib		Normal	threadsafety: Scott Meyers's advice about cached values		18 Jan 2016 18:12	Safety	10
780	CoCoALib		Normal	GroebnerFan/ExternalLib-GFan: improve package	Anna Maria Bigatti	21 Apr 2017 11:06	Improving	20
778	CoCoALib		Normal	CRTMill::myAddInfo accept modulus 1 or not?		21 Mar 2016 15:16	Tidying	0
777	CoCoALib		Normal	SLUG: elimination	Anna Maria Bigatti	22 Mar 2024 18:12	Improving	10
769	CoCoALib		Normal	CoCoALib cone		27 Jan 2020 15:32	Data Structures	10
765	CoCoALib		Normal	ExternalLib-CDD: (needed by GFan)	Anna Maria Bigatti	11 Sep 2019 13:47	Portability	10
763	CoCoALib		Normal	GlobalManager: initialization compatible with initialization of external libs		21 Mar 2016 16:55	Portability	10
758	CoCoALib		Normal	configure: have option to say to look for external libs		03 Sep 2015 11:41	Improving	10



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752	CoCoALib		Normal	Investigate using Boost.build instead of make	John Abbott	28 Apr 2017 11:23	Portability	0
746	CoCoALib		Normal	Problem with GBasis in tower of alg extns		21 Mar 2016 14:29	Various	0
742	CoCoALib		Normal	View PP exponent vector (and order vector?) as an array of long?		01 Sep 2015 12:08	Improving	10
740	CoCoALib		Normal	Addition of sparse (multivariate) polynomials		17 Jun 2016 14:35	Improving	0
738	CoCoALib		Normal	Extend homomorphism to polynomial ring		25 Jun 2015 17:23	New Function	10
729	CoCoALib		Normal	Betti numbers, betti diagram		14 Jun 2018 15:54	Data Structures	10
728	CoCoALib		Normal	Noncommutative algebra "of solvable type"		09 Jul 2015 08:39	New Function	10
725	CoCoALib		Normal	Example database: Slow ideal equality test		10 Jun 2015 14:24	Various	0
710	CoCoALib		Normal	Update normaliz interface?		16 Feb 2024 18:25	Improving	10
707	CoCoALib		Normal	MatrixOrderingMod32749Impl: test and write documentation!	Anna Maria Bigatti	25 Apr 2024 21:46	Safety	50
703	CoCoALib		Normal	Add more operations between modules (CoCoALib)	Anna Maria Bigatti	27 Oct 2017 11:53	New Function	10
695	CoCoALib		Normal	Remove cruft from test files		08 May 2015 11:37	Tidying	0
690	CoCoALib		Normal	Fault tolerant rational reconstruction: implement simultaneous version		23 Apr 2015 19:12	New Function	0
688	CoCoALib		Normal	PolyAlgebraHom (PolyRingHom) evaluate multivariate polynomials		22 Apr 2015 14:38	Improving	10
686	CoCoALib		Normal	myAddMul in poly rings	Anna Maria Bigatti	20 Apr 2015 13:22	Tidying	20
680	CoCoALib		Normal	DistrMPolyClean does not use MemPool for summands?	John Abbott	07 Mar 2023 20:49	Tidying	70
678	CoCoALib		Normal	Accumulator (like a geobucket)		17 Nov 2016 19:03	New Function	20
676	CoCoALib		Normal	Credits to CoCoALib contributors	Anna Maria Bigatti	28 Apr 2017 11:06	Documentation	10
675	CoCoALib		Normal	Matrix determinant over multivariate poly ring		22 May 2015 13:45	Tidying	10
667	CoCoALib		Normal	factor: multivariate + finite characteristic		04 Mar 2015 20:08	New Function	0
665	CoCoALib		Normal	Integrate Janet/Pommaret basis code	John Abbott	12 Jun 2018 18:36	New Function	10
661	CoCoALib		Normal	Laurent polynomials		23 Jan 2015 13:50	New Function	0
651	CoCoALib		Normal	Optimized algorithms for implicitization (slicing algorithm, elim, subalgebra..)		12 Feb 2015 10:33	New Function	10
647	CoCoALib		Normal	Unique copies of free modules?		10 Nov 2014 16:55	Safety	0
644	CoCoALib		Normal	Buchberger-Moeller: add option to stop as soon as 1 poly has been found	John Abbott	06 Nov 2017 13:58	New Function	0
640	CoCoALib		Normal	What is test-Dynamic1.C		29 Oct 2014 11:30	Tidying	0
628	CoCoALib		Normal	Complex twin-floats		22 Sep 2014 18:16	New Function	0
627	CoCoALib		Normal	Gaussian integer and rationals ZZi, QQi		23 Sep 2014 16:30	New Function	0
624	CoCoALib		Normal	Wikipedia	Anna Maria Bigatti	06 Nov 2017 13:40	Documentation	0

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620	CoCoALib		Normal	Redesign CRTMill	John Abbott	21 Mar 2016 14:30	New Function	20
617	CoCoALib		Normal	configure: check all libraries for compatibility		09 Sep 2014 12:21	Portability	0
601	CoCoALib		Normal	LongRange: in which file should it be declared/defined?		08 Mar 2023 20:45	Tidying	10
598	CoCoALib		Normal	Szygy for modules: non-homogeneous module	Anna Maria Bigatti	27 Mar 2024 17:31	Improving	40
589	CoCoALib		Normal	Implement gin (generic initial ideal) in cocoalib	Anna Maria Bigatti	15 Jul 2014 18:17	New Function	0
583	CoCoALib		Normal	New function for printing with extra information		07 Jul 2014 11:48	New Function	0
582	CoCoALib		Normal	Error codes: use same code for "not poly ring" and "not elem poly ring"		26 Mar 2024 14:36	Tidying	30
575	CoCoALib		Normal	Investigate using cmake for configuration	John Abbott	13 Mar 2024 21:19	Portability	10
572	CoCoALib		Normal	Split SparsePolyRing.H into two files? Problem with circular includes.		17 May 2018 16:36	Tidying	0
570	CoCoALib		Normal	Allow use of RingElem instead of ring in some functions (e.g. PPM, CoeffRing)		16 Jul 2014 14:43	New Function	0
569	CoCoALib		Normal	Documentation for ReductionCog		11 Jun 2014 16:04	Documentation	0
565	CoCoALib		Normal	FloatApprox for TwinFloat values?	John Abbott	19 Jul 2016 22:44	New Function	20
564	CoCoALib		Normal	Temporary file for experimentation		16 Jul 2014 14:38	Various	0
562	CoCoALib		Normal	Subrings		29 Sep 2020 13:19	Safety	0
551	CoCoALib		Normal	Reconsider overloaded virtual mem fns		09 Jul 2014 18:00	Safety	0
550	CoCoALib		Normal	add myResolution member field to ideal and (sub)module		13 May 2015 09:57	Data Structures	0
547	CoCoALib		Normal	elim using RingTwinFloat triggers error "SERIOUS"		15 Jun 2016 14:35	Various	0
516	CoCoALib		Normal	Make squarefreefactor work in multiple polynomial extns		10 Jul 2014 14:21	Tidying	0
515	CoCoALib		Normal	Fn to "flatten" multiple polynomial extns		10 Jul 2014 14:22	New Function	0
505	CoCoALib		Normal	Documentation: write doc for RingDenseUPolyClean	Anna Maria Bigatti	21 Sep 2016 17:15	Documentation	0
497	CoCoALib		Normal	Clang: automatic bug finding		04 Apr 2014 17:20	Safety	0
482	CoCoALib		Normal	Unique copies of rings -- smart ctor		20 Oct 2015 14:33	Safety	10
455	CoCoALib		Normal	Which sets of generators in an ideal?		14 Jul 2014 15:17	Various	0
442	CoCoALib		Normal	Eigenvectors		09 Jul 2014 18:05	New Function	0
438	CoCoALib		Normal	Polynomial multiplication (product of RingElem)		10 Jul 2014 16:28	Various	10
437	CoCoALib		Normal	MemPool: order free blocks?		13 Apr 2015 23:31	Tidying	10
436	CoCoALib		Normal	Improve UPoly eval at BigRat for binary rational		01 Aug 2014 08:59	New Function	0
432	CoCoALib		Normal	Semantics of IsPrintedWithMinus		14 Jul 2014 18:13	Various	10
427	CoCoALib		Normal	Error names and error messages (current design)		11 May 2017 10:57	Data Structures	10
420	CoCoALib		Normal	Allow user to give a name to a ring		13 May 2015 09:55	Improving	0

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401	CoCoALib		Normal	NewFreeModule of dimension 0		31 Jul 2014 14:13	Various	0
400	CoCoALib		Normal	add myJBMill member field to ideal		15 Sep 2014 12:04	New Function	0
396	CoCoALib		Normal	PPMonoidElemAlias: redesign PPMonoidElem the same way as RingElem?	John Abbott	13 May 2015 09:57	Data Structures	0
383	CoCoALib		Normal	Resolution/morse: integrate Mario Albert's code into CoCoALib	John Abbott	31 Jul 2014 14:57	New Function	60
360	CoCoALib		Normal	CoCoAServer: what future, what issues?		28 Apr 2017 11:19	Various	0
353	CoCoALib		Normal	Missing documentation and tests for myRecvTwinFloat	John Abbott	14 Jul 2014 14:40	Documentation	0
337	CoCoALib		Normal	Module homs		31 Jul 2014 12:40	New Function	0
329	CoCoALib		Normal	Why is DMPI slower than DMPClean?		13 May 2015 09:54	Improving	0
326	CoCoALib		Normal	C++ nasty surprises		07 Apr 2014 18:13	Portability	10
316	CoCoALib		Normal	submodule constructor different from ideal	Anna Maria Bigatti	10 Jul 2014 16:21	Tidying	0
315	CoCoALib		Normal	Add doc for ApproxPts2		10 Jul 2014 16:23	Documentation	0
305	CoCoALib		Normal	FreeModule: unique copy?		10 Dec 2023 20:43	Tidying	10
302	CoCoALib		Normal	Compilation on M\$Windows: Visual Studio		22 Mar 2024 23:13	Portability	60
297	CoCoALib		Normal	Modules design: brainstorming		31 Jul 2014 14:55	New Function	30
289	CoCoALib		Normal	PrimeField -- new fn?		01 Aug 2014 08:59	New Function	0
282	CoCoALib		Normal	Global setting: to use IsProbPrime in place of IsPrime		01 Aug 2014 08:59		0
281	CoCoALib		Normal	Store unique copy of FF(p) in GlobalManager		04 Apr 2014 17:10		0
277	CoCoALib		Normal	Eliminate class RefPPMonoidElem?		01 Aug 2014 08:59		0
272	CoCoALib		Normal	Forward declarations		07 Apr 2014 18:14	Tidying	0
262	CoCoALib		Normal	Play with GIT		08 Mar 2023 19:54	Various	0
258	CoCoALib		Normal	Multivariate lifting		01 Aug 2014 08:59		0
257	CoCoALib		Normal	Transcribe C4 code for GCD in QQ[x]		01 Aug 2014 08:59		0
246	CoCoALib		Normal	Approx QIR		04 Apr 2014 17:16	New Function	0
232	CoCoALib		Normal	No test for QBGenerator		15 Apr 2015 20:15	Various	0
231	CoCoALib		Normal	Documentation for QBGenerator needs to be improved.		09 Jul 2014 18:06	Documentation	0
229	CoCoALib		Normal	Generator for random ring elements		01 Aug 2014 08:59	New Function	0
227	CoCoALib		Normal	HilbertBasis from Normaliz: full-lattice or not?		31 Jul 2014 12:39	New Function	0
222	CoCoALib		Normal	Printing polynomials - spaces between terms		14 Mar 2023 21:27	Various	30
205	CoCoALib		Normal	Example for change of coordinates with coeffs in a matrix	Anna Maria Bigatti	14 Jul 2014 14:39	Documentation	0
196	CoCoALib		Normal	PPWithMask needs checking	Anna Maria Bigatti	04 Apr 2014 17:50	Documentation	0

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174	CoCoALib		Normal	IsStdGraded: add for PPOrdering, PPMonoid, (Sparse)PolyRing..		01 Aug 2014 08:59	New Function	0
161	CoCoALib		Normal	Convert old "task table" into redmine		07 Apr 2014 14:35	Documentation	0
154	CoCoALib		Normal	GCD normalization (e.g. monic)		24 Nov 2016 13:56	Tidying	20
151	CoCoALib		Normal	Iterated CanonicalHom		13 May 2015 09:58	New Function	0
150	CoCoALib		Normal	RingOf rather than owner? (and than AmbientRing, ...)		30 Jul 2014 17:59	Renaming	10
149	CoCoALib		Normal	Makefile dependencies		01 Aug 2014 08:59	Makefile	0
146	CoCoALib		Normal	Buchberger-Moeller: input conversions		10 Jul 2014 14:17	New Function	0
142	CoCoALib		Normal	Improve threadsafety		21 Mar 2024 20:29	Safety	50
134	CoCoALib		Normal	Convenience ring ctors and homs		11 Jul 2014 12:06	New Function	0
130	CoCoALib		Normal	Design problem in ideals		13 May 2015 09:56	Data Structures	0
129	CoCoALib		Normal	Better GCD		09 Jul 2014 18:08	New Function	0
127	CoCoALib		Normal	Convert DUPFF code to C++	John Abbott	28 Sep 2022 15:04	New Function	50
126	CoCoALib		Normal	New datastructures directory		13 May 2015 09:56	Data Structures	0
125	CoCoALib		Normal	Matrix equation solving; linear system solving	John Abbott	18 Mar 2024 10:00	New Function	50
123	CoCoALib		Normal	IdealOfPoints with generic coeffs		09 Jul 2014 18:15	New Function	0
120	CoCoALib		Normal	LT over QQ: surprisingly slow		10 Jul 2014 16:26	Various	0
114	CoCoALib		Normal	Ideals of polynomials		10 Jul 2014 14:26	Tidying	10
113	CoCoALib		Normal	Introduce PartialHom	John Abbott	09 Jul 2014 18:04	New Function	10
112	CoCoALib		Normal	automatic creation of all function signatures		07 Apr 2014 14:34	Documentation	0
92	CoCoALib		Normal	Error Codes		19 Apr 2017 08:31	Various	0
87	CoCoALib		Normal	Cleanup header for ring classes (so that they are e-diff-able)	Anna Maria Bigatti	10 Jul 2014 16:26	Tidying	10
74	CoCoALib		Normal	printing polynomials		14 Jul 2014 11:07	Various	10