

## CoCoALib - Issues

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
1802	CoCoALib		Normal	Tidying ideal generators (for non-polynomial ideals)		25 Mar 2024 19:05	Improving	0
1798	CoCoALib		Normal	Computing in sub polyring		22 Mar 2024 09:30	Improving	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
1786	CoCoALib		Normal	Add new function for IsInRadical for monomial ideals? (RadicalMembership)	Anna Maria Bigatti	01 Mar 2024 18:37	Improving	10
1764	CoCoALib		Normal	Verbosity messages: avoid printing BIG values		02 Feb 2024 20:34	Improving	0
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
1742	CoCoALib		Normal	MinGens could be faster	Anna Maria Bigatti	18 May 2023 13:44	Improving	10
1737	CoCoALib		Normal	Homogenization of an ideal with ZZ^1-grading	Anna Maria Bigatti	01 Feb 2024 19:59	Improving	20
1733	CoCoALib		Low	FactorINT: funny order		09 Apr 2023 10:33	Improving	0
1730	CoCoALib		Normal	ApplySPRCodomain: relax power/exponent check		27 Nov 2023 20:30	Improving	0
1719	CoCoALib		Normal	FactorINT has got worse	John Abbott	09 Mar 2023 22:37	Improving	90
1706	CoCoALib		Normal	slimgb: Brickenstein, singular		30 Oct 2022 20:30	Improving	0
1705	CoCoALib		Normal	ProgressReporter: prepare for new loop?	John Abbott	21 Mar 2023 05:27	Improving	80
1692	CoCoALib		Normal	Suggestion: Add "JumpTo" function to prime iterators		15 Feb 2024 22:39	Improving	10
1685	CoCoALib		Normal	RingBase::mySwap needed?		07 Mar 2024 20:49	Improving	10
1683	CoCoALib		Immediate	IsIrred in ZZ[x,y]	John Abbott	16 Feb 2024 09:39	Improving	0
1682	CoCoALib		Normal	swap for new classes		16 Feb 2024 09:35	Improving	10
1668	CoCoALib		Normal	Generalize prim		31 Jan 2024 22:03	Improving	0
1667	CoCoALib		Urgent	GBasis over ZZ: port to CoCoALib		26 Mar 2024 17:19	Improving	10
1657	CoCoALib		Normal	Improve CertifyNotPower		31 Jan 2024 22:03	Improving	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
1637	CoCoALib		Low	Intersection of Ideals: has GBasis?		16 Feb 2024 17:25	Improving	0
1588	CoCoALib		Low	ElimMat is slow		22 Mar 2024 09:29	Improving	0

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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
1572	CoCoALib		Normal	Use noexcept	John Abbott	07 Mar 2023 20:38	Improving	70
1559	CoCoALib		Normal	Default ctor for rings		13 Mar 2024 20:42	Improving	10
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
1492	CoCoALib		Low	submat of a submat		16 Feb 2024 17:28	Improving	0
1485	CoCoALib		Normal	Simple syntax for making a quotient ring?		08 Mar 2023 19:51	Improving	0
1446	CoCoALib		Normal	Start using C++14 "move" capability		08 Mar 2024 18:00	Improving	10
1419	CoCoALib		Low	DynamicBitset::lamAll1s		03 Feb 2021 18:18	Improving	0
1417	CoCoALib		Normal	RadicalZeroDim with extra parameter for GBasis timeout	Anna Maria Bigatti	16 Mar 2024 21:42	Improving	20
1394	CoCoALib		Low	Oddly slow GBasis computation (slow final cleanup)	Anna Maria Bigatti	16 Apr 2024 22:46	Improving	70
1378	CoCoALib		Normal	Create two separate radical fns (for 0-dim ideals)		03 Jul 2023 17:49	Improving	0
1371	CoCoALib		Low	French students' example with GFan		27 Nov 2019 15:53	Improving	10
1370	CoCoALib		Low	RingID counter increased inside some functions		31 Jan 2024 22:19	Improving	0
1369	CoCoALib		Low	RandomUnimodularMat is slow with many iters		09 Jan 2020 12:19	Improving	10
1359	CoCoALib		Normal	gcd: low degree but big coeffs can be slow		30 Oct 2019 22:23	Improving	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)		14 Mar 2023 21:23	Improving	80
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
1280	CoCoALib		High	Determinant & Inverse of matrix over non integral domain	John Abbott	21 Jan 2024 19:43	Improving	40
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
1255	CoCoALib		Normal	Ideals with trivial GBasis		08 Mar 2023 19:49	Improving	0
1187	CoCoALib		Normal	Matrix rank is slow (over QQ)		26 Jun 2018 11:29	Improving	0
1156	CoCoALib		Normal	Printing for RingElem		08 Jan 2020 23:02	Improving	0
1130	CoCoALib		Normal	SqFreeFactor: should it work over ZZ?		05 Apr 2019 15:39	Improving	10

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1118	CoCoALib		Low	SLUG: factorization of $x^{9999}$		31 Jan 2024 22:20	Improving	10
1117	CoCoALib		Normal	Better printing of negative coeffs		23 Sep 2019 11:52	Improving	10
1103	CoCoALib		Normal	Pseudo-zero-dim ideals	Anna Maria Bigatti	05 Nov 2021 16:09	Improving	30
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
1059	CoCoALib		Normal	Printing ring for ideals (or just for ideals 0 and 1)		05 May 2017 16:58	Improving	10
1057	CoCoALib		High	Slug: Polynomial ring constructor slow with (big) matrix ordering	Anna Maria Bigatti	22 Mar 2024 09:31	Improving	50
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
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
930	CoCoALib		Low	Printing TwinFloat as (rational) coeff without brackets		24 Sep 2016 21:43	Improving	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
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
872	CoCoALib		Urgent	LinSolve for matrices over Ffp	John Abbott	08 Mar 2024 17:36	Improving	30
869	CoCoALib		Normal	SmallFpImpl: different repr for computation and for storage?		22 Apr 2016 15:14	Improving	0
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
839	CoCoALib		Low	SparsePolyIter: make more compatible with STL		07 Mar 2024 20:01	Improving	10
837	CoCoALib		Normal	factor is very slow on some simple input polynomials		06 Jan 2016 14:40	Improving	0
799	CoCoALib		Low	vector of "indets" in each PPMonoid?	John Abbott	11 Nov 2015 13:47	Improving	20
797	CoCoALib		Normal	SmallFpImpl: make it faster	John Abbott	02 Dec 2015 15:01	Improving	10
785	CoCoALib		Normal	finite fields: global register of fields already created?		15 Oct 2015 17:27	Improving	0
780	CoCoALib		Normal	GroebnerFan/ExternalLib-GFan: improve package	Anna Maria Bigatti	21 Apr 2017 11:06	Improving	20

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777	CoCoALib		Normal	SLUG: elimination	Anna Maria Bigatti	22 Mar 2024 18:12	Improving	10
775	CoCoALib		Low	PPMonoid with 1 extra "exponent"?		15 Sep 2015 20:18	Improving	0
758	CoCoALib		Normal	configure: have option to say to look for external libs		03 Sep 2015 11:41	Improving	10
743	CoCoALib		Urgent	Better errors: give supplementary info about the error		15 Mar 2024 18:33	Improving	10
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
718	CoCoALib		Normal	Insert calls to CheckForInterrupt	Anna Maria Bigatti	23 Oct 2023 20:41	Improving	90
710	CoCoALib		Normal	Update normaliz interface?		16 Feb 2024 18:25	Improving	10
688	CoCoALib		Normal	PolyAlgebraHom (PolyRingHom) evaluate multivariate polynomials		22 Apr 2015 14:38	Improving	10
598	CoCoALib		Normal	Syzygy for modules: non-homogeneous module	Anna Maria Bigatti	27 Mar 2024 17:31	Improving	40
420	CoCoALib		Normal	Allow user to give a name to a ring		13 May 2015 09:55	Improving	0
329	CoCoALib		Normal	Why is DMPI slower than DMPClean?		13 May 2015 09:54	Improving	0