

## CoCoALib - Issues

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
1791	CoCoALib		Urgent	Fix Google-search link in the html documentation	Anna Maria Bigatti	14 Mar 2024 09:24	Documentation	100
1789	CoCoALib		Urgent	GradingMat with negative weights should complain (or deal with them properly!!)	Anna Maria Bigatti	18 Mar 2024 16:15	Improving	100
1788	CoCoALib		Normal	New MatrixView/function "FirstRows/FirstCols"?	Anna Maria Bigatti	20 Mar 2024 15:53	New Function	100
1780	CoCoALib		Normal	radical for ideals in SparsePolyRing: code in C++	Anna Maria Bigatti	22 Mar 2024 09:13	New Function	100
1779	CoCoALib		Normal	Radical error with lex (again)	Anna Maria Bigatti	23 Feb 2024 12:28	Various	100
1763	CoCoALib		Normal	implement ideal(R) for zero ideal, with no generators?	Anna Maria Bigatti	16 Feb 2024 18:01	New Function	100
1739	CoCoALib		Normal	IsHomog for ideals	Anna Maria Bigatti	01 Mar 2024 14:57	Improving	100
1729	CoCoALib		Urgent	Bug HilbertPoly of zero-dimensional ideals	Anna Maria Bigatti	12 Apr 2023 14:45	Maths Bugs	100
1700	CoCoALib		Normal	boost_1_80_0	John Abbott	23 Nov 2022 17:36	Documentation	100
1649	CoCoALib		Normal	Add file SparsePolyOps-vector.C	Anna Maria Bigatti	25 Mar 2024 17:49	Tidying	100
1598	CoCoALib		Normal	RingHom: implement phi(X) as apply(phi, X) also for X vector and matrix	Anna Maria Bigatti	18 Feb 2022 15:24	Improving	100
1592	CoCoALib		High	Normaliz 3.8.10	Anna Maria Bigatti	28 Jan 2022 17:34	Various	100
1591	CoCoALib		High	Compilation of Normaliz	Anna Maria Bigatti	07 Mar 2022 10:06	Documentation	100
1589	CoCoALib		Normal	IdealOfPoints: allow matrix of points to be defined over "wrong" ring	Anna Maria Bigatti	04 Feb 2022 22:07	Improving	100
1528	CoCoALib		Normal	MacOS compilation with clang	John Abbott	23 Feb 2022 11:38	Tidying	100
1452	CoCoALib		High	Release CoCoALib-0.99710	Anna Maria Bigatti	09 Oct 2020 14:16	Various	100
1434	CoCoALib		Normal	GBasisByHomog for DegLex	Anna Maria Bigatti	06 Mar 2020 17:41	Improving	100
1427	CoCoALib		Normal	New function: LawrenceMat	Anna Maria Bigatti	06 Mar 2020 16:35	New Function	100
1416	CoCoALib		Normal	IdealOfProjectivePoints and MinGens	Anna Maria Bigatti	04 Mar 2020 14:19	Maths Bugs	100
1409	CoCoALib		Normal	myTestIsPrimary & Co. : fix design	Anna Maria Bigatti	30 Apr 2020 14:20	Safety	100
1389	CoCoALib		Normal	myZeroPtr and myOnePtr	John Abbott	13 Jan 2020 12:07	Data Structures	100
1366	CoCoALib		Normal	Should configure remove the file ERR_MESSAGES if it's empty?	John Abbott	12 Feb 2020 15:57	Tidying	100
1347	CoCoALib		Normal	New function: ctor of PPVector with vector<RingElem>	Anna Maria Bigatti	29 Oct 2019 19:44	Improving	100
1345	CoCoALib		High	Problem with linking the library	Anna Maria Bigatti	19 Oct 2019 20:28	Safety	100
1338	CoCoALib		Normal	Release CoCoALib-0.99700	Anna Maria Bigatti	20 May 2020 13:30	Various	100
1336	CoCoALib		Normal	Rename SparsePolyOps-MonomialIdeal into SparsePolyOps-IdealMonomial?	Anna Maria Bigatti	15 Oct 2019 17:33	Renaming	100
1332	CoCoALib		Normal	New function: vector of RingElem from string -- in CoCoALib	Anna Maria Bigatti	29 Oct 2019 16:21	New Function	100
1330	CoCoALib		Normal	New syntax for NewQuotientRing	Anna Maria Bigatti	15 Oct 2019 17:52	Improving	100
1329	CoCoALib		Normal	New syntax for creating homomorphisms (PolyAlgebraHom)	Anna Maria Bigatti	09 Nov 2020 10:03	Improving	100

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
1326	CoCoALib		Normal	Modify function myElim so that it returns ideal? (not quite)	Anna Maria Bigatti	18 Mar 2024 16:03	Tidying	100
1295	CoCoALib		Urgent	Never use "using namespace .." in header files	John Abbott	29 Oct 2019 12:00	Portability	100
1251	CoCoALib		Normal	New function: radical for monomial ideal	Anna Maria Bigatti	15 Oct 2019 15:29	New Function	100
1238	CoCoALib		Urgent	ReadExpr is too slow on long lists of monomial with many indets: ---> use RingElems instead	Anna Maria Bigatti	12 Feb 2020 09:44	Improving	100
1212	CoCoALib		Normal	New function: GBasisByHomog	Anna Maria Bigatti	22 Mar 2024 14:32	New Function	100
1211	CoCoALib		High	HilbertSeries should check grading	Anna Maria Bigatti	03 Oct 2019 10:37	Maths Bugs	100
1209	CoCoALib		High	New function: HasPositiveGrading	Anna Maria Bigatti	03 Oct 2019 10:43	New Function	100
1206	CoCoALib		Normal	syz, SyzOfGens: which shifts for zero?	Anna Maria Bigatti	28 Mar 2024 10:15	Maths Bugs	100
1205	CoCoALib		Urgent	SyzOfGens: bug with zero generators	Anna Maria Bigatti	03 Aug 2018 18:09	Improving	100
1203	CoCoALib		Normal	factor over algebraic extensions	Anna Maria Bigatti	31 Jul 2018 13:13	Improving	100
1195	CoCoALib		Normal	Release: CoCoALib-0.99580 (together with CoCoA-5.2.4)		06 Aug 2018 16:16	Various	100
1184	CoCoALib		Normal	should BeginIter(RingElem) be in SparsePolyIter or in SparsePolyOps-RingElem?	John Abbott	12 Feb 2020 18:17	Tidying	100
1182	CoCoALib		Normal	"mod" for BigInt	John Abbott	03 Aug 2018 16:27	Tidying	100
1178	CoCoALib		Normal	New function: myPrimaryDecomposition_0dim	Anna Maria Bigatti	03 Aug 2018 17:41	New Function	100
1177	CoCoALib		Normal	File names: use "SparsePolyOps" prefix for pertinent files	Anna Maria Bigatti	03 Aug 2018 16:18	Various	100
1169	CoCoALib		Normal	New function: RandomLinearForm (CoCoALib)	Anna Maria Bigatti	02 Aug 2018 16:59	New Function	100
1165	CoCoALib		Normal	MinPoly over QQ: verification may be very slow	Anna Maria Bigatti	03 Aug 2018 17:37	Improving	100
1163	CoCoALib		Normal	Split SparsePolyRing.C in smaller files	Anna Maria Bigatti	02 Aug 2018 17:04	Renaming	100
1159	CoCoALib		Normal	Add global enum "verify/DontVerify"	John Abbott	25 Jun 2018 15:06	Data Structures	100
1158	CoCoALib		Normal	New function: MinPolyQuotHeuristic --> MinPolyQuot with VerificationLevel	Anna Maria Bigatti	02 Aug 2018 16:42	New Function	100
1149	CoCoALib		Normal	Release: CoCoALib-0.99600 (together with CoCoA-5.2.4)	Anna Maria Bigatti	09 Aug 2018 10:36	Various	100
1145	CoCoALib		Normal	File names, coding conventions: Fns, Ops, Operations? part 2	John Abbott	03 Aug 2018 16:17	Renaming	100
1144	CoCoALib		Normal	File names, coding conventions: Fns, Ops, Operations? part 1		19 Dec 2017 07:44	Renaming	100
1143	CoCoALib		Urgent	Polynomial multiplication wrong for non integral rings	John Abbott	20 Dec 2017 15:48	Maths Bugs	100
1126	CoCoALib		Normal	New function: SubmoduleOfMinGens	Anna Maria Bigatti	02 Aug 2018 16:20	New Function	100
1101	CoCoALib		High	Bug in MinPolyModular (insufficient rational reconstruction)	Anna Maria Bigatti	15 Dec 2017 16:42	Maths Bugs	100
1090	CoCoALib		Normal	ExternLib-MathSAT: first prototype	Anna Maria Bigatti	19 Dec 2017 07:50	New Function	100
1081	CoCoALib		Normal	ideal() * RingElem gives error	Anna Maria Bigatti	08 Nov 2017 17:03	Maths Bugs	100
1065	CoCoALib		Normal	Design: should we allow an ideal to change ring?	John Abbott	07 Sep 2023 08:25	Data Structures	100
1064	CoCoALib		Normal	Bug in MinPolyModular (ugly prime)	Anna Maria Bigatti	10 Nov 2017 12:16	Improving	100
1063	CoCoALib		Normal	Catching an (expected) error	Anna Maria Bigatti	08 Nov 2017 14:24	Documentation	100

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
1058	CoCoALib		Normal	CoCoALib version in Documentation and Examples	Anna Maria Bigatti	19 Dec 2017 07:50	Documentation	100
1056	CoCoALib		Normal	Release: CoCoALib-0.99560 (together with CoCoA-5.2.2)	Anna Maria Bigatti	17 Jan 2018 12:09	Various	100
1053	CoCoALib		Normal	New function: IdealOfGBasis, IdealOfMinGens in CoCoALib	Anna Maria Bigatti	20 Nov 2017 16:07	New Function	100
1052	CoCoALib		Normal	ReadExpr(P, string) and RingElem(P, string) in CoCoALib	Anna Maria Bigatti	10 Nov 2017 12:34	Improving	100
1035	CoCoALib		Normal	Improvement: how to sort QuotientBasis?	John Abbott	06 Nov 2017 15:53	Improving	100
1009	CoCoALib		Normal	coefficients for MinPoly e Frobenius	Anna Maria Bigatti	03 Aug 2018 17:16	Improving	100
966	CoCoALib		Normal	New function or explain: first and last for a vector?	Anna Maria Bigatti	14 Feb 2020 10:21	Documentation	100
961	CoCoALib		Normal	New function: ReducedGBasis	Anna Maria Bigatti	21 Apr 2017 17:08	New Function	100
957	CoCoALib		Normal	New function: HasGBasis	Anna Maria Bigatti	29 Apr 2017 08:32	New Function	100
953	CoCoALib		Normal	new file for old functions: obsolescent.C	John Abbott	29 Mar 2017 18:13	Renaming	100
951	CoCoALib		Normal	New function: IsSqFree	John Abbott	18 Nov 2016 23:09	New Function	100
944	CoCoALib		High	Release: CoCoALib-0.99550 (together with CoCoA-5.2.0)	Anna Maria Bigatti	08 May 2017 11:54	Tidying	100
908	CoCoALib		High	Sum of ideals: what are the generators of $(x) + (0)$ ?	Anna Maria Bigatti	08 Mar 2024 14:34	Improving	100
902	CoCoALib		Normal	New function: FrobeniusMat	Elisa Palezzato	28 Apr 2017 09:31	New Function	100
901	CoCoALib		Normal	New function: PrimaryDecomposition0 in CoCoALib	Anna Maria Bigatti	03 Aug 2018 17:40	New Function	100
900	CoCoALib		Normal	New function: MinPoly of RingElem in quotient ring	Anna Maria Bigatti	03 Aug 2018 17:31	New Function	100
899	CoCoALib		High	IsMaximal, IsPrimary for IDEAL (in cocoalib)	Anna Maria Bigatti	25 Nov 2017 10:40	New Function	100
887	CoCoALib		Normal	My first compilations with clang	Anna Maria Bigatti	16 Jan 2018 11:37	Portability	100
855	CoCoALib		High	Copyright and authorship?	John Abbott	15 Mar 2023 08:06	Portability	100
854	CoCoALib		Normal	Function MakeTermOrd should be renamed MakeTermOrdMat?	Anna Maria Bigatti	28 Mar 2024 16:25	Renaming	100
848	CoCoALib		Normal	Implement MinPoly in CoCoALib	Anna Maria Bigatti	22 Mar 2016 18:02	New Function	100
796	CoCoALib		Normal	CoCoALib function for radical (or SqFree) of a polynomial	John Abbott	06 Nov 2017 15:31	New Function	100
764	CoCoALib		Normal	ExternalLib: simplify configuration	Anna Maria Bigatti	03 Aug 2018 17:33	Improving	100
762	CoCoALib		Normal	ExternalLib-GFan: first prototype	Anna Maria Bigatti	24 Mar 2016 08:04	New Function	100
754	CoCoALib		High	Release: CoCoALib-0.99538 (together with CoCoA-5.1.2)	Anna Maria Bigatti	08 Oct 2015 14:47	Tidying	100
747	CoCoALib		Normal	New function for making list of symbols (indeterminate names)	John Abbott	01 Feb 2016 14:21	Improving	100
715	CoCoALib		Normal	RandomSubsetIndices, RandomTupleIndices?	John Abbott	30 Jul 2015 17:39	New Function	100
705	CoCoALib		Normal	DetDirect calls myAddMul with 0 argument -- funny compilation problem??	Anna Maria Bigatti	26 Jun 2015 16:15	Improving	100
683	CoCoALib		Normal	Module index component in internal compressed representation	Anna Maria Bigatti	15 Dec 2017 16:37	Documentation	100
623	CoCoALib		Normal	Inverse of a matrix over ZZ	Anna Maria Bigatti	11 May 2015 17:54	New Function	100
621	CoCoALib		High	Release: CoCoALib-0.99536	Anna Maria Bigatti	08 Oct 2015 14:48	Tidying	100
618	CoCoALib		High	Instructions for compiling libnormaliz	Anna Maria Bigatti	14 Feb 2022 18:22	Portability	100

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
604	CoCoALib		Normal	Release: CoCoALib-0.99535	Anna Maria Bigatti	11 May 2015 14:07	Tidying	50
602	CoCoALib		Normal	OrdMat: should it be a reference to a MatrixView in all PPOOrderings?	John Abbott	23 Mar 2016 15:24	New Function	100
599	CoCoALib		Normal	Release: CoCoALib-0.99534	Anna Maria Bigatti	11 Sep 2014 16:37	Tidying	100
587	CoCoALib		Normal	port to CoCoALib: Homomorphism pkg (ker, IsInjective, IsSurjective..)	John Abbott	03 Aug 2018 18:11	New Function	100
577	CoCoALib		High	Hilbert crashes with > 100 indeterminates	Anna Maria Bigatti	31 Jul 2014 16:57	Maths Bugs	100
528	CoCoALib		Normal	Release: CoCoALib-0.99533	Anna Maria Bigatti	30 Jul 2014 10:56	Tidying	100
510	CoCoALib		Normal	SyzOfGens (CoCoALib): fix shifts	Anna Maria Bigatti	17 Apr 2014 16:36	Maths Bugs	100
507	CoCoALib		Normal	CoCoA website: CoCoALib-0.99532	Anna Maria Bigatti	02 Apr 2014 15:40	Documentation	100
496	CoCoALib		Normal	ideal: minimize or minimalized?	Anna Maria Bigatti	01 Apr 2014 18:52	New Function	100
467	CoCoALib		Normal	Keep CoCoALib web page up to date! All pages!	Anna Maria Bigatti	18 Feb 2022 15:32	Documentation	100
452	CoCoALib		Normal	Documentation for adding functions to CoCoA-5 (BuiltInFunctions and BuiltInOneLiners)	Anna Maria Bigatti	31 Jul 2014 12:31	Documentation	100
391	CoCoALib		Normal	Check consistency of template class factorization		03 Apr 2014 11:54	Safety	100
390	CoCoALib		Normal	Store unique copy of QQ[t_1..t_n] (RingQQt) in GlobalManager	John Abbott	29 Oct 2013 14:30	New Function	90
389	CoCoALib		Normal	problem loading library.H (parallel make -j4)	Anna Maria Bigatti	29 Oct 2013 13:31	Documentation	100
374	CoCoALib		Immediate	Porting "IdealOfProjectivePoints"	John Abbott	08 Feb 2019 20:56	New Function	100
373	CoCoALib		Normal	add DeleteCol, DeleteRow	Anna Maria Bigatti	17 Apr 2014 09:51	New Function	100
366	CoCoALib		High	function (CoCoALib) for minimal generators (like old Minimalize)	Anna Maria Bigatti	03 Apr 2014 11:52	New Function	100
361	CoCoALib		Normal	implement IsPrime3, IsMaximal3	John Abbott	25 Nov 2017 10:42	New Function	100
357	CoCoALib		Normal	Constructor for vectors? CoCoAVector	Anna Maria Bigatti	12 Feb 2020 14:43	New Function	100
354	CoCoALib		Normal	New function BinRepr (was BinExp, also known as Macaulay representation)	John Abbott	29 May 2013 16:41	New Function	100
351	CoCoALib		Normal	Problems with DenseMatImpl::myResize	Anna Maria Bigatti	17 Apr 2014 08:24	Safety	100
350	CoCoALib		Immediate	problem with "matrix" argument in functions	John Abbott	11 Sep 2014 16:41	Safety	100
342	CoCoALib		Normal	Remove denominators: QQ[x] -> ZZ[x] (and PushBack(coeff, PP))	John Abbott	17 Apr 2014 09:23	New Function	100
340	CoCoALib		Normal	"configure" does not set BOOST if there are multiple copies in "standard" location	John Abbott	28 May 2013 18:41	Makefile	100
312	CoCoALib		Normal	LongRange(a,b) returning vector of long a..b (included)	Anna Maria Bigatti	03 Apr 2014 11:38	New Function	100
311	CoCoALib		Immediate	XelMat, StdDegRevLexMat, ... should be MatrixView	John Abbott	20 Jan 2017 15:16	New Function	100
310	CoCoALib		Normal	ordering and grading (weights) matrix	Anna Maria Bigatti	31 Jul 2014 17:50	Renaming	100
304	CoCoALib		High	Module ordering and grading (and shifts)	Anna Maria Bigatti	31 Jul 2014 15:01	New Function	100
298	CoCoALib		High	Valgrind: keep CoCoALib at 0 memory leaks	Anna Maria Bigatti	01 Aug 2014 08:21	Safety	100

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
291	CoCoALib		Normal	NewZZmod and NewRingFp: improve manual, clarify implementation	John Abbott	03 Apr 2014 11:54	Tidying	100
285	CoCoALib		Normal	Notes for adding/removing files from documentation	John Abbott	17 Apr 2014 09:22	Documentation	100
278	CoCoALib		Normal	add CoeffVecWRT to cocoalib	John Abbott	29 Oct 2013 14:50	New Function	100
264	CoCoALib		High	Compilation problem with "degree.H" (inline fn defns)		16 Jul 2014 14:42	Various	100
254	CoCoALib		Normal	How to return a Hilbert Series in CoCoALib	John Abbott	17 Apr 2014 15:19	New Function	100
252	CoCoALib		Normal	Documentation for tmp.H (utils on vectors and other containers)	John Abbott	31 Jul 2014 16:53	Documentation	100
236	CoCoALib		Normal	Add homog (homogenized) for ideal	Anna Maria Bigatti	23 May 2013 08:26	New Function	100
219	CoCoALib		Normal	myDeriv for RingDenseUPolyClean still missing	Anna Maria Bigatti	02 Apr 2014 08:49	New Function	100
215	CoCoALib		Normal	Janet Bases: check and include code in CoCoALib (first prototype)	Anna Maria Bigatti	24 Mar 2016 11:50	New Function	100
213	CoCoALib		Normal	test-Normaliz1.C	Christof Soeger	01 Oct 2012 15:43	Various	100
211	CoCoALib		Normal	NBM: add SparsePolyRing as argument for ordering	John Abbott	18 Feb 2013 16:48	New Function	100
210	CoCoALib		Normal	Normaliz: "double" cone for speed and safety	John Abbott	18 Feb 2013 16:25	New Function	100
209	CoCoALib		High	ReadExpr: input polynomials in CoCoALib	Anna Maria Bigatti	27 Aug 2014 18:38	New Function	100
203	CoCoALib		High	Function to get the Hilbert Polynomial ring from GlobalManager	Anna Maria Bigatti	03 Apr 2014 11:52	New Function	100
202	CoCoALib		Normal	MatrixView/function for viewing a single row or column (RowMat, ColMat)	John Abbott	20 Mar 2024 14:09	Data Structures	100
199	CoCoALib		Normal	CFApprox: division by zero	John Abbott	29 Jun 2012 17:23	Maths Bugs	100
195	CoCoALib		High	OrdvArith documentation needs rewriting	John Abbott	03 Apr 2014 11:51	Documentation	100
178	CoCoALib		Normal	IsHomog: should it throw an error when there is no grading?	Anna Maria Bigatti	29 Oct 2013 14:25	Safety	90
160	CoCoALib		Normal	Cleanup doc for rings	Anna Maria Bigatti	28 May 2012 14:11	Documentation	100
140	CoCoALib		Normal	Doc & example for convert	John Abbott	29 May 2013 16:48	Documentation	100
124	CoCoALib		Normal	change long args in matrices into MachineInt (?)	John Abbott	30 May 2013 15:55	Safety	100
122	CoCoALib		Normal	Porting "LinKer"	John Abbott	15 Jan 2021 21:10	New Function	100
121	CoCoALib		Urgent	Porting "IdealOfPoints"	John Abbott	29 May 2013 16:58	New Function	100
116	CoCoALib		Urgent	ordering matrices with rational coefficients	Anna Maria Bigatti	02 Apr 2012 15:22	New Function	100
86	CoCoALib		Normal	Clean up DivMask and doc	Anna Maria Bigatti	06 Feb 2012 19:33	Documentation	100
85	CoCoALib		High	QuotientRing problem	Anna Maria Bigatti	05 Jul 2012 10:11	Maths Bugs	100
81	CoCoALib		Normal	DMPI vs DMPII is slower than expected	John Abbott	01 Feb 2012 11:35	Various	100
70	CoCoALib		Normal	Index page for html documentation	Anna Maria Bigatti	04 Jul 2012 10:50	Documentation	100
68	CoCoALib		Normal	cleanup doc for matrix, MatrixViews, *Matrix*,....	Anna Maria Bigatti	31 Jul 2014 16:56	Documentation	100
67	CoCoALib		Normal	Rename MatrixViews	John Abbott	17 Apr 2014 18:38	Renaming	100
66	CoCoALib		Normal	BigInt - NumTheory	John Abbott	15 Apr 2014 12:39	Documentation	100

#	Project	Parent task	Priority	Subject	Assignee	Updated	Category	% Done
65	CoCoALib	Feature #68: cleanup doc for matrix, MatrixViews, *Matrix*,....	Normal	matrix - MatrixView	Anna Maria Bigatti	04 Jul 2012 10:49	Documentation	100
64	CoCoALib		Normal	submat takes only vector<long>	John Abbott	08 Mar 2024 17:17	Improving	100
63	CoCoALib		Normal	Add links to examples in documentation	Anna Maria Bigatti	30 May 2012 13:40	Documentation	100
37	CoCoALib		High	matrix constructors	John Abbott	15 Dec 2017 15:18	Data Structures	100
36	CoCoALib		Urgent	Saturation	Anna Maria Bigatti	05 Dec 2011 18:27	Maths Bugs	100
30	CoCoALib		High	SwapRows, Cols	Anna Maria Bigatti	05 Jul 2012 10:40	New Function	100
29	CoCoALib		Normal	CoCoA website: update web page for CoCoALib-0.9950	Anna Maria Bigatti	02 Apr 2014 15:39	Documentation	100
28	CoCoALib		Normal	rename RingQ, RingZ --> RingQQ, RingZZ	Anna Maria Bigatti	10 Feb 2012 18:41	Renaming	100
24	CoCoALib		Normal	object files collected in one directory	Anna Maria Bigatti	14 Oct 2020 15:35	Makefile	100
22	CoCoALib		High	Rename PPMonoidEvZZ?	John Abbott	23 May 2013 16:58	Renaming	100
21	CoCoALib		Normal	Rename NumTheory and NumTheoryQQ	Anna Maria Bigatti	13 Jul 2012 15:28	Renaming	100
17	CoCoALib		Normal	implement "binomial" (coefficient) for RingElem	John Abbott	17 Apr 2014 09:22	New Function	100
15	CoCoALib		High	Adjoint of a non-invertible matrix	John Abbott	16 Sep 2021 13:48	New Function	100
11	CoCoALib		Normal	Bareiss algorithm	John Abbott	10 Oct 2019 18:45	New Function	100
3	CoCoALib		Normal	implement creation of a PPMonoidElement from vector<BigInt>	John Abbott	15 Mar 2013 17:35	New Function	100
2	CoCoALib		Normal	Makefile problem in ROOT and/or src/AlgebraicCore	John Abbott	12 Feb 2020 15:00	Makefile	100