

## CoCoALib - CoCoALib-0.99850 (Mar 2024)

#	Priority	Subject	Assignee	Updated	Category	% Done	Estimated time
<b>Data Structures (3)</b>							
1647	Normal	Suppress zero from ideal generators? Detect 1 and simplify generators?	Anna Maria Bigatti	25 Mar 2024 19:02	Data Structures	100	
379	Normal	Iter for subsets/tuples	John Abbott	13 Mar 2024 18:25	Data Structures	100	
202	Normal	MatrixView/function for viewing a single row or column (RowMat, ColMat)	John Abbott	20 Mar 2024 14:09	Data Structures	100	
<b>Documentation (5)</b>							
1791	Urgent	Fix Google-search link in the html documentation	Anna Maria Bigatti	14 Mar 2024 09:24	Documentation	100	0.5
1676	Normal	txt2tags: include in source distribution?	John Abbott	04 Nov 2022 14:31	Documentation	100	1.5
1265	High	Unregistered TXT files in doc	John Abbott	23 Feb 2024 11:34	Documentation	100	2.5
256	Normal	Improve doc about ordering/grading for poly rings	Anna Maria Bigatti	14 Mar 2023 19:52	Documentation	100	3.0
111	Normal	Mod fn for computing remainder	John Abbott	13 Mar 2024 21:01	Documentation	100	0.76
<b>Improving (19)</b>							
1789	Urgent	GradingMat with negative weights should complain (or deal with them properly!!)	Anna Maria Bigatti	18 Mar 2024 16:15	Improving	100	
1769	Normal	FixedDivisor is sometimes surprisingly slow	John Abbott	22 Dec 2023 20:57	Improving	100	2.22
1768	Normal	Limit indentation in verbose mesgs?	John Abbott	22 Jan 2024 10:36	Improving	100	1.23
1761	Normal	MakeTermOrdMat: improve error mesg	John Abbott	13 Mar 2024 21:16	Improving	100	0.99
1755	High	CheckForInterrupt: give more info?	John Abbott	22 Dec 2023 20:56	Improving	100	1.9
1754	Normal	IsSqFree poorly implemented	John Abbott	23 Feb 2024 11:39	Improving	100	2.88
1739	Normal	IsHomog for ideals	Anna Maria Bigatti	01 Mar 2024 14:57	Improving	100	2.01
1735	Normal	PushFront/PushBack without checks?	John Abbott	08 Mar 2024 14:38	Improving	100	1.11
1721	Normal	Verbose messages: print level?	Anna Maria Bigatti	12 Apr 2023 14:56	Improving	100	
1716	Normal	Qn: factor for BigInt	John Abbott	14 Mar 2023 21:32	Improving	100	1.49
1641	High	gcd does not recognize univariate input	John Abbott	21 Mar 2024 20:18	Improving	100	5.33
1606	Normal	Return type with const	John Abbott	21 Mar 2024 20:24	Improving	100	1.66
1579	Low	Readexpr/RingElem: unhelpful error message when input is wrong	John Abbott	23 Feb 2024 12:39	Improving	100	3.01
1569	Normal	IsInRadical too slow (test-RadicalMembership)		01 Mar 2024 18:40	Improving	100	
1557	Normal	Reading list of rationals is too slow	John Abbott	10 Mar 2023 18:23	Improving	100	3.11
1511	Normal	Use C++14 constexpr	John Abbott	16 Mar 2024 21:55	Improving	100	2.99
1466	Normal	Ops += *= etc for Matrices?	John Abbott	08 Aug 2022 20:01	Improving	100	
908	High	Sum of ideals: what are the generators of $(x) + (0)$ ?	Anna Maria Bigatti	08 Mar 2024 14:34	Improving	100	2.01

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64	Normal	submat takes only vector<long>	John Abbott	08 Mar 2024 17:17	Improving	100	2.06
<b>Makefile (2)</b>							
1360	Normal	configure script: add flags for "only cocoa5" or "both cocoa5 and cocoa5" (for boost)	John Abbott	07 Mar 2023 21:00	Makefile	100	14.01
701	Low	Makefile; limit dependencies on external libs		14 Oct 2022 16:51	Makefile	100	
<b>Maths Bugs (8)</b>							
1790	High	saturate with zero ideals	John Abbott	21 Mar 2024 17:56	Maths Bugs	100	
1773	Normal	CyclotomicFactorIndexes: gave wrong answer	John Abbott	22 Dec 2023 21:30	Maths Bugs	100	0.99
1758	Normal	Graeffe "sign bug"	John Abbott	22 Dec 2023 20:59	Maths Bugs	100	1.33
1729	Urgent	Bug HilbertPoly of zero-dimensional ideals	Anna Maria Bigatti	12 Apr 2023 14:45	Maths Bugs	100	
1725	High	resultant: gives wrong answer when should be 0	John Abbott	09 Mar 2023 20:49	Maths Bugs	100	0.75
1710	Urgent	IsSqFree, IsIrred bugs in ZZ[x] and QQ[x]	John Abbott	07 Mar 2023 20:55	Maths Bugs	100	3.9
1690	High	resultant gives wrong answer if an arg has deg 0	John Abbott	18 Jan 2023 18:33	Maths Bugs	100	0.55
1206	Normal	syz, SyzOfGens: which shifts for zero?	Anna Maria Bigatti	28 Mar 2024 10:15	Maths Bugs	100	3.0
<b>New Function (12)</b>							
1788	Normal	New MatrixView/function "FirstRows/FirstCols"?	Anna Maria Bigatti	20 Mar 2024 15:53	New Function	100	4.0
1780	Normal	radical for ideals in SparsePolyRing: code in C++	Anna Maria Bigatti	22 Mar 2024 09:13	New Function	100	
1770	Normal	Evaluate polynomial function/class	John Abbott	16 Mar 2024 21:52	New Function	100	3.11
1763	Normal	implement ideal(R) for zero ideal, with no generators?	Anna Maria Bigatti	16 Feb 2024 18:01	New Function	100	1.01
1723	Normal	New fn CoprimePart, OddPart: naming question	John Abbott	07 Mar 2023 20:27	New Function	100	1.8
1694	Normal	New expv/exponents function?	John Abbott	09 Mar 2023 21:48	New Function	100	3.33
1684	Normal	RandomNBitPrime - new fn	John Abbott	08 Aug 2022 20:08	New Function	100	0.8
1619	Normal	Make saturate available in CoCoALib	Anna Maria Bigatti	22 Mar 2024 10:14	New Function	100	
1488	High	BuiltIn Interreduce-Function	John Abbott	15 Mar 2023 08:40	New Function	100	
1212	Normal	New function: GBasisByHomog	Anna Maria Bigatti	22 Mar 2024 14:32	New Function	100	8.0
1210	Normal	New Fn: make public "coefficients" (of poly wrt a given PP basis)	John Abbott	08 Aug 2022 20:41	New Function	100	3.99
800	Urgent	PPMonoidSparse: impl of sparse PPs	John Abbott	09 Mar 2023 22:15	New Function	100	8.99
<b>Portability (9)</b>							
1749	High	Configuration hiccups on Mac M1	John Abbott	21 Mar 2024 20:31	Portability	100	3.33
1726	Normal	Dangling references to temporaries	John Abbott	25 Mar 2024 18:05	Portability	100	3.75
1712	Normal	Windows: New configuration script	John Abbott	13 Mar 2023 21:50	Portability	100	

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1661	Normal	Microsoft: cannot compile with signal handling	Nico Mexis	11 Apr 2024 10:10	Portability	100	
1361	Low	Compilation fails when compiling with libgsl	Florian Walsh	03 Feb 2024 19:56	Portability	100	0.55
1166	Normal	C++11: allows large integer literals (in NumTheory-prime.C)	John Abbott	07 Mar 2024 20:49	Portability	100	0.77
855	High	Copyright and authorship?	John Abbott	15 Mar 2023 08:06	Portability	100	6.66
613	Normal	Which ubuntu / debian packages are needed to compile CoCoA	John Abbott	30 Nov 2022 22:02	Portability	100	2.77
82	Normal	C++11 compatibility questions	John Abbott	26 Sep 2022 20:34	Portability	100	1.99
<b>Renaming (1)</b>							
1771	Normal	Hadamard bound: field names	John Abbott	22 Dec 2023 21:31	Renaming	100	0.95
<b>Safety (4)</b>							
1522	High	SEGV: avoid long linked lists of loaves in MemPools	John Abbott	09 Mar 2023 21:50	Safety	100	3.99
1085	High	Fns with "OUT" args: should they give ERR::MixedRings?	John Abbott	21 Mar 2024 20:29	Safety	100	1.11
950	Normal	factor and SmoothFactor for integers --> FactorINT, FactorINT_TrialDiv, FactorINT_PollardRho	John Abbott	13 Mar 2023 22:02	Safety	100	
645	Normal	Automatic mapping of RingElem: user selectable at run-time (GlobalManager?)	John Abbott	16 Feb 2024 17:41	Safety	100	1.11
<b>Tidying (7)</b>							
1753	Normal	Clean up EulerTotient, InvTotient jungle in NumTheory-misc	John Abbott	29 Mar 2024 08:25	Tidying	100	0.95
1693	Normal	SizeInBase: obsolete	John Abbott	07 Oct 2022 15:25	Tidying	100	0.66
1689	Normal	Automatic mapping of RHS in += etc	John Abbott	16 Feb 2024 17:35	Tidying	100	0.88
1680	Normal	FloorLog2 or SizeInBase?	John Abbott	08 Aug 2022 20:16	Tidying	100	1.66
1649	Normal	Add file SparsePolyOps-vector.C	Anna Maria Bigatti	25 Mar 2024 17:49	Tidying	100	5.01
1326	Normal	Modify function myElim so that it returns ideal? (not quite)	Anna Maria Bigatti	18 Mar 2024 16:03	Tidying	100	
536	Normal	Make RingBase::myCharacteristic a fn rather than a proc	John Abbott	09 Mar 2023 21:58	Tidying	100	1.0
<b>Various (3)</b>							
1779	Normal	Radical error with lex (again)	Anna Maria Bigatti	23 Feb 2024 12:28	Various	100	
1687	Normal	Release CoCoALib 0.99850	Anna Maria Bigatti	29 Mar 2024 10:42	Various	50	
253	Normal	W.Brun's wish list	John Abbott	14 Mar 2023 20:09	Various	100	2.49