

## CoCoA-5 - CoCoA-5.?.?

#	Priority	Subject	Assignee	Updated	Category	% Done	Estimated time
<b>None (6)</b>							
453	Normal	Automatic conversion from INT (or RAT) to RINGELEM		02 Sep 2014 11:15		20	
421	Normal	Allow user to give a name to a ring (in C5)		18 Jul 2014 15:05		10	
230	Normal	More curiously slow code -- squaring a polynomial		04 Apr 2014 15:10		0	
422	Normal	Bug or feature for protected name? (Use command)		04 Apr 2014 15:09		0	
633	Normal	New operations? ScalarProduct(MODULELEM,LIST), MATRIX * MODULELEM		17 Mar 2017 10:55		0	
770	Normal	CoCoA type "cone"		22 May 2017 14:12		0	
<b>Cleaning (6)</b>							
491	Normal	Cleaning: Cruft in CoCoA-5 packages		25 Jul 2018 14:26	Cleaning	20	
376	Normal	Hilbert: Redesign hp.cpkg5 and public functions in TmpHilbert.C	Anna Maria Bigatti	06 Aug 2020 12:21	Cleaning	10	
989	Normal	init file obligatory?		01 Dec 2016 11:36	Cleaning	10	
477	Normal	Eliminate keyword Alias?		04 Apr 2014 14:31	Cleaning	0	
480	Normal	gcd too slow for large degree univariate poly		30 Oct 2019 22:44	Cleaning	0	
1351	Normal	Clean up package points.cpkg		25 Oct 2019 13:34	Cleaning	0	
<b>CoCoA-4 function to be added (10)</b>							
171	High	Negate LIST, MAT,...		04 Apr 2014 16:27	CoCoA-4 function to be added	0	5.0
388	High	port optimized resolutions to CoCoA-5	Anna Maria Bigatti	02 Jul 2014 16:13	CoCoA-4 function to be added	0	
412	Normal	intersection (all lower case)	Anna Maria Bigatti	28 Jul 2014 17:41	CoCoA-4 function to be added	20	4.0
614	Normal	Add functions based on MayerVietorisTree	Anna Maria Bigatti	04 Sep 2014 14:05	CoCoA-4 function to be added	10	4.0
454	Normal	interpolate	John Abbott	04 Apr 2014 16:24	CoCoA-4 function to be added	0	
487	Normal	ScalarProduct accepts MatrixRow?		18 Jun 2019 15:22	CoCoA-4 function to be added	0	
501	Normal	Toric: resurrect function TestSet (and find better name for it?)	Anna Maria Bigatti	09 Apr 2014 15:53	CoCoA-4 function to be added	0	
512	Normal	Resurrect MakeCheck()	Anna Maria Bigatti	28 Jul 2014 16:20	CoCoA-4 function to be added	0	1.0
702	Normal	Add more operations for modules	Anna Maria Bigatti	15 May 2015 09:05	CoCoA-4 function to be added	0	5.0
960	Normal	New function: IdealAndSeparatorsOfPoints		02 Nov 2016 18:06	CoCoA-4 function to be added	0	

## CoCoA-5 function: new (17)

05 May 2024

#	Priority	Subject	Assignee	Updated	Category	% Done	Estimated time
504	Normal	New operators: += -= *= /=	John Abbott	25 Oct 2019 11:55	CoCoA-5 function: new	20	
980	Normal	CoeffSize: function to measure the size of coeffs in a poly		28 Nov 2023 22:29	CoCoA-5 function: new	20	3.0
1107	Normal	CoCoA Online: install (using InteractiveShell)	Anna Maria Bigatti	16 Oct 2017 16:54	CoCoA-5 function: new	10	
274	Normal	InputForm for output readable as input	Anna Maria Bigatti	04 Apr 2014 16:43	CoCoA-5 function: new	10	4.0
451	Normal	Port function NewSymbol/NewSymbols to CoCoA-5		09 Nov 2015 15:29	CoCoA-5 function: new	10	
731	Normal	Primary Decomposition in CoCoA-5		02 Oct 2017 13:30	CoCoA-5 function: new	10	
1305	Normal	Create a directory		02 Sep 2019 16:31	CoCoA-5 function: new	10	
235	Normal	Add LucasTest to cocoa5?		04 Apr 2014 16:38	CoCoA-5 function: new	0	
483	Normal	Unique copies of rings in CoCoA-5		04 Apr 2014 16:42	CoCoA-5 function: new	0	
492	Normal	New C5 fn for adjusting the warning level		22 Jul 2014 12:38	CoCoA-5 function: new	0	
626	Normal	Output Betti numbers		17 Sep 2014 13:11	CoCoA-5 function: new	0	
753	Normal	New function: LeastDegPolynomial (LDP)		30 Jul 2015 17:29	CoCoA-5 function: new	0	
964	Normal	New function: MakeMultiset?	Anna Maria Bigatti	25 Jul 2018 15:35	CoCoA-5 function: new	0	2.0
1153	Normal	New function: gin for algebraic extensions	Anna Maria Bigatti	25 Jul 2018 15:36	CoCoA-5 function: new	0	
993	Normal	New function: RingQQi()? extension of QQ with imaginary unit		13 Nov 2017 15:05	CoCoA-5 function: new	0	
1285	Normal	New Fn: make a homogeneous list of ringelem		23 May 2019 11:53	CoCoA-5 function: new	0	
737	Low	Elementary transcendental functions (sin, cos, tan, log, exp)		20 Mar 2017 09:00	CoCoA-5 function: new	50	

### EmacsUI (10)

148	Normal	C-c C-p in emacs goes to wrong line		06 Oct 2022 20:15	EmacsUI	20	
434	Normal	Emacs UI: very slow when input file is big (with long lines)		09 Apr 2014 15:52	EmacsUI	0	
772	Low	Emacs UI: send-region and send-line make sense inside a cpkg5 file?		08 Sep 2015 12:49	EmacsUI	20	
424	Low	Emacs UI: Name of emacs init file	Anna Maria Bigatti	22 Jul 2014 11:21	EmacsUI	10	7.0
468	Low	Emacs UI: indentation is wrong after ?keyword		17 Apr 2014 18:47	EmacsUI	0	
653	Low	Emacs UI: use "warning colour" for an unmatched */		04 Dec 2014 15:39	EmacsUI	0	
660	Low	Emacs UI: endfunc does not indent the line		04 Mar 2020 22:06	EmacsUI	0	
663	Low	Emacs UI: C-c C-\ copies line cursor is on		04 Feb 2015 13:19	EmacsUI	0	
671	Low	Emacs UI: swapped splitting	Anna Maria Bigatti	09 Mar 2015 13:49	EmacsUI	0	
1076	Low	EmacsUI: interrupt copies line cursor is on to bottom then interrupts		12 Jun 2017 18:27	EmacsUI	0	

### enhancing/improving (28)

#	Priority	Subject	Assignee	Updated	Category	% Done	Estimated time
875	Normal	Interpreter is too slow reading a big polynomial		20 Oct 2020 18:05	enhancing/improving	10	
1003	Normal	New syntax for creating poly rings?		27 Jan 2017 15:54	enhancing/improving	10	
1025	Normal	Example of slow LEX GBasis computation		15 Nov 2017 14:57	enhancing/improving	10	
1068	Normal	PolyRing constructor: NewOrdvArith computed twice		21 Mar 2024 11:55	enhancing/improving	10	
1129	Normal	Generic Timeout for CoCoA-5?		28 Nov 2017 18:06	enhancing/improving	10	
1271	Normal	Allow Interruption of printing?		17 Apr 2019 10:17	enhancing/improving	10	
1296	Normal	Matrixrow-functions		18 Jun 2019 15:15	enhancing/improving	10	
600	Normal	efficient subalgebras	Anna Maria Bigatti	30 Jul 2014 17:29	enhancing/improving	0	
646	Normal	Unique copies of free modules?		10 Nov 2014 16:42	enhancing/improving	0	
655	Normal	MakeSet can be very slow		20 Jan 2015 17:12	enhancing/improving	0	
656	Normal	eval: in which ring should the result be?		20 Jan 2015 20:25	enhancing/improving	0	
862	Normal	append has bad complexity		05 Apr 2016 13:40	enhancing/improving	0	
876	Normal	subst: allowed also for indets in the coeff ring		07 May 2016 13:59	enhancing/improving	0	
879	Normal	LOGAR: make CoCoA-5 easier to use		09 May 2016 15:30	enhancing/improving	0	
888	Normal	Escaped newline to allow a long line to be split into several "physical lines"		07 Jun 2016 00:26	enhancing/improving	0	
916	Normal	use command: unhelpful error if you use := instead of ::=		20 Oct 2020 17:50	enhancing/improving	0	
917	Normal	CallOnGroebnerFanIdeals: better to use an iterator (or a "stream")		26 Nov 2016 17:46	enhancing/improving	0	
941	Normal	Improve coverage of CoCoA-5 tests		10 Oct 2016 21:09	enhancing/improving	0	
984	Normal	GroebnerFanIdeals: order matrices sometimes have "large" entries		22 Nov 2021 20:19	enhancing/improving	0	
1138	Normal	Latex: matrix	Anna Maria Bigatti	11 Dec 2017 16:45	enhancing/improving	0	
1116	Normal	Port RowMat, ColMat, MatByRows,... to CoCoA-5	Anna Maria Bigatti	01 Oct 2019 14:40	enhancing/improving	0	8.0
1722	Low	Daft slug		27 Feb 2023 12:57	enhancing/improving	20	
657	Low	use command, ring syntax, RingOf		20 Jan 2015 20:32	enhancing/improving	0	
659	Low	Ring ID: separate index values for "system created rings"?		23 Jan 2015 14:11	enhancing/improving	0	
857	Low	floor, ceil, and NearestInt for RingElem in CoCoA-5?		21 Feb 2019 09:17	enhancing/improving	0	
1034	Low	Improve error message when args to (infix operator) lsln have incompatible types		17 Mar 2017 13:19	enhancing/improving	0	
1275	Low	incr and decr are slow		29 Apr 2019 17:53	enhancing/improving	0	
1291	Low	LinearSimplify: sometimes not optimal		27 May 2019 21:17	enhancing/improving	0	
<b>External Libs (2)</b>							
712	Normal	External Libs: missing dependencies in Makefiles	John Abbott	01 Oct 2019 14:31	External Libs	10	

#	Priority	Subject	Assignee	Updated	Category	% Done	Estimated time
720	Normal	External libs: specifying I/O streams (initialization?)		22 May 2015 14:14	External Libs	0	
<b>GUI (11)</b>							
38	Normal	GUI: open file "with C5"		09 Apr 2014 15:00	GUI	0	
133	Normal	Qt GUI: Make better distinction between input and output in the output window		12 Mar 2021 09:39	GUI	0	30.0
136	Normal	GUI: Add an edit menu to the top bar (CoCoA GUI on MacOS)		02 Jul 2014 16:56	GUI	0	
198	Normal	Appunti per (eventuale) tesi triennale Informatica: CoCoA GUI		30 Sep 2022 19:05	GUI	0	300.0
276	Normal	TeXmacs interface		09 Apr 2014 15:01	GUI	0	
527	Normal	GUI: better name for the graphical interface?		27 Jul 2015 19:25	GUI	0	
612	Low	The C5 gui does not exit properly when using the exit menu entry	John Abbott	28 Feb 2024 21:20	GUI	100	0.61
1713	Low	Windows: Qt-Gui does not link correctly	Nico Mexis	25 Feb 2024 20:42	GUI	50	
1093	Low	GUI: bugs and slugs	John Abbott	18 Aug 2022 15:36	GUI	10	
299	Low	GUI: message "running.." (close to output window?)		15 May 2020 10:56	GUI	0	
611	Low	GUI: quitting provokes Imminent Disaster		28 Feb 2024 21:24	GUI	0	
<b>Incomplete function (4)</b>							
920	Normal	Empty matrix: warning, error, or empty matrix?		08 Sep 2016 11:45	Incomplete function	10	
106	Normal	l:f (IDEAL and RINGELEM) -- operator colon	Anna Maria Bigatti	02 Sep 2014 11:12	Incomplete function	10	3.0
96	Normal	sort is too slow	John Abbott	28 May 2021 20:40	Incomplete function	0	15.0
100	Normal	BringIn should map only the indets in its arg		26 Sep 2022 20:25	Incomplete function	0	15.0
<b>Manual/documentation (9)</b>							
296	Normal	Documentation for Parser/Interpreter	Anna Maria Bigatti	09 Apr 2014 17:22	Manual/documentation	10	
943	Normal	Managing credits		16 May 2017 14:49	Manual/documentation	10	
1314	Normal	Emacs UI: open manual pages in a separate frame?		27 Sep 2019 17:23	Manual/documentation	10	
13	Normal	(short) manual for emacs interface		12 Oct 2016 16:56	Manual/documentation	0	
323	Normal	system variables		04 Apr 2014 17:06	Manual/documentation	0	
677	Normal	Credits to CoCoA-5 contributors		15 Nov 2019 15:28	Manual/documentation	0	
1031	Normal	ScalarProduct: exact defn and manual page		17 Mar 2017 11:03	Manual/documentation	0	
1054	Normal	CoCoAManual: improved search, or improved selection of "see also" pages		28 Apr 2017 11:42	Manual/documentation	0	
1707	Normal	User forum?		01 Nov 2022 22:02	Manual/documentation	0	
<b>Parser/Interpreter (16)</b>							

#	Priority	Subject	Assignee	Updated	Category	% Done	Estimated time
35	Normal	Optional warnings for fn-proc arity	John Abbott	07 Oct 2022 10:56	Parser/Interpreter	100	0.75
290	Normal	Which functions are defined in CoCoALibSupplement?	Anna Maria Bigatti	29 Mar 2019 19:23	Parser/Interpreter	20	2.0
287	Normal	--fullCoCoALibError prints too much (Try/UponError)	Anna Maria Bigatti	02 Sep 2016 13:54	Parser/Interpreter	10	35.0
95	Normal	Error/warning if fn-proc is neither fn nor proc?		15 Jun 2016 14:13	Parser/Interpreter	0	
101	Normal	rethrow in Try .. UponError .. EndTry		23 Oct 2020 10:18	Parser/Interpreter	0	
363	Normal	Colon operator, 2nd arg		09 Apr 2014 15:07	Parser/Interpreter	0	
375	Normal	allow single function call in "use" : e.g. "Use NewFractionField(R);"		02 Sep 2014 11:14	Parser/Interpreter	0	
435	Normal	Assignment to protected variable		04 Apr 2014 17:05	Parser/Interpreter	0	
486	Normal	Warning about variable hiding another -- too zealous		01 Sep 2014 13:55	Parser/Interpreter	0	20.0
597	Normal	Interpreter.C: remove calls to WrongTypeException		02 Mar 2020 21:45	Parser/Interpreter	0	
749	Normal	IsDefined does not follow reference to undefined optional param		31 Jul 2015 12:08	Parser/Interpreter	0	
1234	Normal	CoCoA should read unicode		01 Oct 2019 14:36	Parser/Interpreter	0	
183	Low	Template for unaryMinus?		25 Jul 2018 17:15	Parser/Interpreter	0	
669	Low	NUL char in input terminates CoCoA-5		04 Mar 2020 21:28	Parser/Interpreter	0	
915	Low	When is a semicolon needed to end a statement/command?		28 Feb 2024 21:27	Parser/Interpreter	0	
928	Low	ciao, exit, quit can be used not only at top level		18 Oct 2021 11:08	Parser/Interpreter	0	
<b>Portability (2)</b>							
629	Normal	Windows-GUI: compilation with MinGW	Anna Maria Bigatti	19 Mar 2024 22:21	Portability	20	10.0
1006	Normal	External dependencies for building		27 Oct 2021 13:13	Portability	10	