

**CoCoA-5**

		2017-10				2017-11				2017-12				2018-1				2018-2				2018-3							
		40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13		
CoCoA																													
CoCoA-5																													
intersection																													
Hermite normal form																													
RingID: remove this function?																													
Profiling with clang																													
CanonicalHom																													
Manual of functions vs ManExamples																													
CoCoA-5 releases on redmine																													
CoCoA-5 - CoCoA-5.4.2																													
Automatic mapping between (some) (...)																													
theValue makes copy																													
Elim ordering and matrix ordering (...)																													
C++11 compatibility questions																													
OpenOFile																													
Functions throwing error even though (...)																													
Janet Bases: port function into (...)																													
CoCoA-5 Projects for students (e.g. (...)																													
Installation instructions (on website)																													
port SmithNormalForm (CoCoA-4)package (...)																													
EmacsUI Source/SourceRegion produce (...)																													
Emacs UI; remove cruft																													
Eliminate package BinRepr																													
Review utility of package IO																													
CoCoAManual: improve part on input/output																													
Gaussian Elimination																													
Prototype package for Linear Commutative (...)																													
Variable It: assign before or after (...)																													

**CoCoA.**

<p>Speed of some Normaliz calls (NmzComputation)</p> <p>NotBuiltin.cpkg5: indent for MODULE</p> <p>Referring to indets with multiple (...)</p> <p>Emacs UI: send-file (C-c C-f) should (...)</p> <p>Implicit: make easier to use with (...)</p> <p>Add TUTORIALs to online manual</p> <p>Clean up CoCoALibSupplement</p> <p>Function "ideal" evaluates the (...)</p> <p>"universal denominator" (related (...)</p> <p>Microsoft (Windows 10, maybe other (...)</p> <p>Separators for elements of a list</p> <p>LinKerBasis is user-unfriendly</p> <p>CoCoAManual: AffHilbertFn accepts (...)</p> <p>Eigenvectors: inconsistent return (...)</p> <p>IsInRadical: for monomial ideals</p> <p>Use Flatpak and/or Snap on Linux?</p> <p>RealRoots: rational roots (but (...)</p> <p>MinPoly for matrix: fix in cocoalib (...)</p> <p>SLUG: filling an array</p> <p>append is slow</p> <p>ker: for PolyAlgHom from <math>QQ[x,y,z]</math> (...)</p> <p>GDPR: website, mailing list</p> <p>MSatLinSolve: req minor improvements</p> <p>Online manual entry for RingElem (...)</p> <p>ShapeLemma: no manual entry</p> <p>Split BuiltinFunctions-CoCoALib.C (...)</p> <p>Interpreter: fns which accept INT (...)</p> <p>Vim Plugin for CoCoA</p> <p>Automatic conversion from RINGELEM (...)</p> <p>CoCoA-5 manual: incorrect empty (...)</p> <p>CoCoA manual: entry for operators, (...)</p> <p>Package Edgeldeal not documented</p> <p>New function: find ?</p> <p>GFan also for Microsoft?</p>	
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<p>GUI with Qt5</p> <p>thmproving package</p> <p>Manual entry for NewPolyRing</p> <p>MakeTerm: implement in C++</p> <p>Stack overflow reading long list (...)</p> <p>HTML manual: search using keywords?</p> <p>Emacs UI: cocoa5-shell-check-process (...)</p> <p>Disable readline if input is redirected</p> <p>Surprising parser error: INT+DOT+IDENTIFIER</p> <p>Automatic way to produce statically (...)</p> <p>Use symbolic links for release (...)</p> <p>Filenames in release CoCoAManual/html (...)</p> <p>IntersectList or IntersectionList</p> <p>Get indexed indets from a polyring</p> <p>Website: link to JSAG?</p> <p>HilbertSeries: make into proper (...)</p> <p>Lin alg with polys</p> <p>Documentation for making ring with (...)</p> <p>Emacs UI: indentation in a package</p> <p>Use "special" names for variables (...)</p> <p>SystemCommand in Microsoft version</p> <p>More flexible ring creation syntax (...)</p> <p>Initial ring</p> <p>Interpreter fn Value::from can (...)</p> <p>RingElem and IndetSymbols not compatible</p> <p>Install CoCoA-5 on MacOS-10.15+</p> <p>New functions: argmin, argmax</p> <p>foreach with ref to list entry?</p> <p>CoCoA coding conventions for parser/interpreter?</p> <p>CoeffOfTerm: in CoCoALibSupplement</p> <p>Man page for UniversalGBasis</p> <p>Add sagbi package</p> <p>Emacs: avoid making buffer visible (...)</p> <p>subst: not checking args properly</p>	
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DivAlg slower than NR  
 elim for modules  
 Geometrical theorem proving package  
 What does rad do?  
 RMap and image: obsolescent?  
 ApproxSolveTF  
 Slow sqfr: rad(f)  
 New fn ElapsedTimeFrom?  
 Unhelpful behaviour in "compatibility (...)  
 SqFreeFactor crashes over non-perfect (...)  
 Doc for the various BuiltIn files  
 EmacsUI: annoying colours  
 NewMat: should be obsolescent?  
 Use filesystem::path instead of (...)  
 Unexpected or unhelpful error using (...)  
 Missing/Incomplete manual entries  
 MinSubsetOfGens sometimes very (...)  
 RealRoots: crashes after interrupting  
 Allow user to choose whether to (...)  
 ApproxSolve and RationalSolve take (...)  
 Potentially confusing prompt: waiting (...)  
 Jordan Normal Form?  
 GCDList not documented  
 Refactor C++ impl in OnlineHelp  
 BuiltinFunctions-GFan includes (...)  
 Should Starting be case-insensitive?  
 Manual entry for random (see also)  
 Release CoCoA 5.4.2  
 Preliminary packages  
 Linux: just 1 executable, should (...)  
 Documentation/Manual for HilbertFn  
 ManExamples target: need t reset (...)  
 NewPolyRing with indices -- better (...)  
 Quitting can be slow

<p>Continued fraction: arg type RAT (...)</p> <p>GenReprCompute: <b>SERIOUS ERROR</b></p> <p>Strange bug: demo-Osaka2015</p> <p>Makefile problem: needlessly relinks (...)</p> <p>CoCoA-5 - CoCoA-5.4.4</p> <p>Approximate BuchbergerMoeller: (...)</p> <p>CoCoAManual: General part of the (...)</p> <p>Emacs UI: keywords in multiline (...)</p> <p>Manual: remove old stuff about (...)</p> <p>Revive old CoCoA4 package called (...)</p> <p>Emacs UI: slow with long lines</p> <p>Poor memory management?</p> <p>SLUG: RationalSolve slow and stupid</p> <p>Add CoCoA5 function NmzHilbertBasisKer</p> <p>BuiltinOneLiners -- less precise (...)</p> <p>CantStop playing CantStop</p> <p>Refine Poset impl &amp; doc</p> <p>Verbosity level in CoCoA5</p> <p>EvalPolyAtMat</p> <p>Make it easy to run the tests in (...)</p> <p>Better error mesg for 1.2.3.4?</p> <p>CoCoA web site "analytics"</p> <p>Difference between seealso and (...)</p> <p>Add CoCoA-5 syntax: syz(&lt;F,&gt; list (...)</p> <p>New function ModuleElems? (like (...)</p> <p>CoCoA-5 - CoCoA-5.?.?</p> <p>(short) manual for emacs interface</p> <p>GUI: open file "with C5"</p> <p>Error/warning if fn-proc is neither (...)</p> <p>sort is too slow</p> <p>BringIn should map only the indets (...)</p> <p>rethrow in Try .. UponError .. (...)</p> <p>I:f (IDEAL and RINGELEM) -- (...)</p> <p>Qt GUI: Make better distinction (...)</p>	
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GUI: Add an edit menu to the top (...)  
 C-c C-p in emacs goes to wrong (...)  
 Negate LIST, MAT,...  
 Template for unaryMinus?  
 InputForm for output readable as (...)  
 Appunti per (eventuale) tesi triennale (...)  
 More curiously slow code -- squaring (...)  
 Add LucasTest to cocoa5?  
 TeXmacs interface  
 --fullCoCoALibError prints too (...)  
 Which functions are defined in (...)  
 Documentation for Parser/Interpreter  
 GUI: message "running.." (close (...)  
 system variables  
 Colon operator, 2nd arg  
 allow single function call in "use" (...)  
 Hilbert: Redesign hp.cpkg5 and (...)  
 port optimized resolutions to CoCoA-5  
 intersection (all lower case)  
 Allow user to give a name to a (...)  
 Bug or feature for protected name? (...)  
 Emacs UI: Name of emacs init file  
 Emacs UI: very slow when input (...)  
 Assignment to protected variable  
 Port function NewSymbol/NewSymbols (...)  
 Automatic conversion from INT (or (...)  
 interpolate  
 Emacs UI: indentation is wrong (...)  
 Eliminate keyword Alias?  
 gcd too slow for large degree univariate (...)  
 Unique copies of rings in CoCoA-5  
 Warning about variable hiding another (...)  
 ScalarProduct accepts MatrixRow?  
 Cleaning: Cruft in CoCoA-5 packages

<p>New C5 fn for adjusting the warning (...)</p> <p>Toric: resurrect function TestSet (...)</p> <p>New operators: += -= *= /=</p> <p>Resurrect MakeCheck()</p> <p>GUI: better name for the graphical (...)</p> <p>efficient subalgebras</p> <p>Interpreter.C: remove calls to (...)</p> <p>GUI: qutting provokes Imminent (...)</p> <p>Add functions based on MayerVietorisTree</p> <p>Output Betti numbers</p> <p>Windows-GUI: compilation with MinGW</p> <p>New operations? ScalarProduct(MODULEELEM,LIST), (...)</p> <p>Unique copies of free modules?</p> <p>Emacs UI: use "warning colour" (...)</p> <p>MakeSet can be very slow</p> <p>eval: in which ring should the (...)</p> <p>use command, ring syntax, RingOf</p> <p>Ring ID: separate index values (...)</p> <p>Emacs UI: endfunc does not indent (...)</p> <p>Emacs UI: C-c C-\ copies line cursor (...)</p> <p>NUL char in input terminates CoCoA-5</p> <p>Emacs UI: swapped splitting</p> <p>Credits to CoCoA-5 contributors</p> <p>Add more operations for modules</p> <p>External Libs: missing dependencies (...)</p> <p>External libs: specifying I/O streams (...)</p> <p>Primary Decomposition in CoCoA-5</p> <p>Elementary transcendental functions (...)</p> <p>IsDefined does not follow reference (...)</p> <p>New function: LeastDegPolynomial (...)</p> <p>CoCoA type "cone"</p> <p>Emacs UI: send-region and send-line (...)</p> <p>floor, ceil, and NearestInt for (...)</p> <p>append has bad complexity</p>	
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Interpreter is too slow reading (...)  
 subst: allowed also for indets (...)  
 LOGAR: make CoCoA-5 easier to use  
 Escaped newline to allow a long (...)  
 When is a semicolon needed to end (...)  
 use command: unhelpful error if (...)  
 CallOnGroebnerFanIdeals: better (...)  
 Empty matrix: warning, error, or (...)  
 ciao, exit, quit can be used not (...)  
 Improve coverage of CoCoA-5 tests  
 Managing credits  
 New function: IdealAndSeparatorsOfPoints  
 New function: MakeMultiset?  
 CoeffSize: function to measure (...)  
 GroebnerFanIdeals: order matrices (...)  
 init file obligatory?  
 New function: RingQQi()? extension (...)  
 New syntax for creating poly rings?  
 External dependencies for building  
 Example of slow LEX GBasis computation  
 ScalarProduct: exact defn and manual (...)  
 Improve error message when args (...)  
 CoCoAManual: improved search, or (...)  
 PolyRing constructor: NewOrdvArith (...)  
 EmacsUI: interrupt copies line (...)  
 GUI: bugs and slugs  
 CoCoA Online: install (using InteractiveShell)  
 Port RowMat, ColMat, MatByRows,... (...)  
 Generic Timeout for CoCoA-5?  
 Latex: matrix  
 New function: gin for algebraic (...)  
 CoCoA should read unicode  
 Allow Interruption of printing?  
 incr and decr are slow



<b>New Fn: make a homogeneous list (...)</b> <b>LinearSimplify: sometimes not optimal</b> <b>Matrixrow-functions</b> <b>Create a directory</b> <b>Emacs UI: open manual pages in (...)</b> <b>Clean up package points.cpkg</b> <b>User forum?</b> <b>Windows: Qt-Gui does not link correctly</b> <b>Daft slug</b>	
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