

# CoCoA-5

|   | 2024-1         |   |   |   |   | 2024-2 |   |   |   |    | 2024-3 |    |    |    |    | 2024-4 |    |    |    |    | 2024-5 |    |    |    |    | 2024-6 |  |  |  |  |
|---|----------------|---|---|---|---|--------|---|---|---|----|--------|----|----|----|----|--------|----|----|----|----|--------|----|----|----|----|--------|--|--|--|--|
|   | 1              | 2 | 3 | 4 | 5 | 6      | 7 | 8 | 9 | 10 | 11     | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21     | 22 | 23 | 24 | 25 | 26     |  |  |  |  |
| <b>CoCoA</b><br><b>CoCoA-5</b><br>intersection<br>Hermite normal form<br>RingID: remove this function?<br>Profiling with clang<br>CanonicalHom<br>Manual of functions vs ManExamples<br>CoCoA-5 releases on redmine<br>CoCoA-5 - CoCoA-5.4.2<br>Automatic mapping between (some) (...)<br>theValue makes copy<br>Elim ordering and matrix ordering (...)<br>C++11 compatibility questions<br>OpenOFile<br>Functions throwing error even though (...)<br>Janet Bases: port function into (...)<br>CoCoA-5 Projects for students (e.g. (...)<br>Installation instructions (on website)<br>port SmithNormalForm (CoCoA-4)package (...)<br>EmacsUI Source/SourceRegion produce (...)<br>Emacs UI; remove cruft<br>Eliminate package BinRepr<br>Review utility of package IO<br>CoCoAManual: improve part on input/output<br>Gaussian Elimination<br>Prototype package for Linear Commutative (...)<br>Speed of some Normaliz calls (NmzComputation) | <b>CoCoA-5</b> |   |   |   |   |        |   |   |   |    |        |    |    |    |    |        |    |    |    |    |        |    |    |    |    |        |  |  |  |  |

NotBuiltin.cpkg5: indent for MODULE  
Referring to indets with multiple (...)  
Implicit: make easier to use with (...)  
Add TUTORIALs to online manual  
Clean up CoCoALibSupplement  
Function "ideal" evaluates the (...)  
"universal denominator" (related (...)  
Microsoft (Windows 10, maybe other (...)  
Separators for elements of a list  
LinKerBasis is user-unfriendly  
CoCoAManual: AffHilbertFn accepts (...)  
Eigenvectors: inconsistent return (...)  
IsInRadical: for monomial ideals  
Use Flatpak and/or Snap on Linux?  
RealRoots: rational roots (but (...)  
MinPoly for matrix: fix in cocoalib (...)  
SLUG: filling an array  
append is slow  
ker: for PolyAlgHom from QQ[x,y,z] (...)  
GDPR: website, mailing list  
MSatLinSolve: req minor improvements  
Online manual entry for RingElem (...)  
ShapeLemma: no manual entry  
Split BuiltinFunctions-CoCoALib.C (...)  
Interpreter: fns which accept INT (...)  
Vim Plugin for CoCoA  
Automatic conversion from RINGELEM (...)  
CoCoA-5 manual: incorrect empty (...)  
CoCoA manual: entry for operators, (...)  
Package Edgeldeal not documented  
New function: find ?  
GFan also for Microsoft?  
GUI with Qt5  
thmproving package

Manual entry for NewPolyRing  
MakeTerm: implement in C++  
Stack overflow reading long list (...)  
HTML manual: search using keywords?  
Emacs UI: cocoa5-shell-check-process (...)  
Surprising parser error: INT+DOT+IDENTIFIER  
Automatic way to produce statically (...)  
Use symbolic links for release (...)  
Filenames in release CoCoAManual/html (...)  
IntersectList or IntersectionList  
Get indexed indets from a polyring  
Website: link to JSAG?  
HilbertSeries: make into proper (...)  
Lin alg with polys  
Documentation for making ring with (...)  
Emacs UI: indentation in a package  
SystemCommand in Microsoft version  
More flexible ring creation syntax (...)  
Initial ring  
Interpreter fn Value::from can (...)  
RingElem and IndetSymbols not compatible  
Install CoCoA-5 on MacOS-10.15+  
New functions: argmin, argmax  
foreach with ref to list entry?  
CoCoA coding conventions for parser/interpreter?  
CoeffOfTerm: in CoCoALibSupplement  
Man page for UniversalGBasis  
Add sagbi package  
Emacs: avoid making buffer visible (...)  
subst: not checking args properly  
DivAlg slower than NR  
elim for modules  
Geometrical theorem proving package  
RMap and image: obsolescent?

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| <p> <b>ApproxSolveTF</b><br/> <b>Slow sqfr: rad(f)</b><br/> <b>New fn ElapsedTimeFrom?</b><br/> <b>SqFreeFactor crashes over non-perfect (...)</b><br/> <b>Doc for the various Builtin files</b><br/> <b>EmacsUI: annoying colours</b><br/> <b>NewMat: should be obsolescent?</b><br/> <b>Use filesystem::path instead of (...)</b><br/> <b>Missing/Incomplete manual entries</b><br/> <b>MinSubsetOfGens sometimes very (...)</b><br/> <b>RealRoots: crashes after interrupting</b><br/> <b>Allow user to choose whether to (...)</b><br/> <b>ApproxSolve and RationalSolve take (...)</b><br/> <b>Potentially confusing prompt: waiting (...)</b><br/> <b>Jordan Normal Form?</b><br/> <b>GCDList not documented</b><br/> <b>Refactor C++ impl in OnlineHelp</b><br/> <b>BuiltinFunctions-GFan includes (...)</b><br/> <b>Should Starting be case-insensitive?</b><br/> <b>Manual entry for random (see also)</b><br/> <b>Release CoCoA 5.4.2</b><br/> <b>Preliminary packages</b><br/> <b>Linux: just 1 executable, should (...)</b><br/> <b>Documentation/Manual for HilbertFn</b><br/> <b>ManExamples target: need to reset (...)</b><br/> <b>NewPolyRing with indices -- better (...)</b><br/> <b>Continued fraction: arg type RAT (...)</b><br/> <b>GenReprCompute: SERIOUS ERROR</b><br/> <b>Do not use random inside tests!!</b><br/> <b>Makefile problem: needlessly relinks (...)</b><br/> <b>CoCoA-5 - CoCoA-5.4.4</b><br/> <b>Approximate BuchbergerMoeller: (...)</b><br/> <b>CoCoAManual: General part of the (...)</b><br/> <b>Emacs UI: keywords in multiline (...)</b> </p> |  |
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Emacs UI: send-file (C-c C-f) should (...)  
Manual: remove old stuff about (...)  
Revive old CoCoA4 package called (...)  
Emacs UI: slow with long lines  
Poor memory management?  
Disable readline if input is redirected  
SLUG: RationalSolve slow and stupid  
Add CoCoA5 function NmzHilbertBasisKer  
BuiltinOneLiners -- less precise (...)  
CantStop playing CantStop  
Unexpected or unhelpful error using (...)  
Refine Poset impl & doc  
Verbosity level in CoCoA5  
EvalPolyAtMat  
Make it easy to run the tests in (...)  
Better error mesg for 1.2.3.4?  
CoCoA web site "analytics"  
Difference between seealso and (...)  
Add CoCoA-5 syntax: syz(<F,> list (...)  
New function ModuleElems? (like (...)  
CoCoA-5 - CoCoA-5.?.?  
(short) manual for emacs interface  
GUI: open file "with C5"  
Error/warning if fn-proc is neither (...)  
sort is too slow  
BringIn should map only the indets (...)  
rethrow in Try .. UponError .. (...)  
I:f (IDEAL and RINGELEM) -- (...)  
Qt GUI: Make better distinction (...)  
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  
New C5 fn for adjusting the warning (...)  
Toric: resurrect function TestSet (...)  
New operators: += -= \*= /=  
Resurrect MakeCheck()  
GUI: better name for the graphical (...)

efficient subalgebras  
Interpreter.C: remove calls to (...)  
GUI: quitting provokes Imminent (...)  
Add functions based on MayerVietorisTree  
Output Betti numbers  
Windows-GUI: compilation with MinGW  
New operations? ScalarProduct(MODULEELEM,LIST), (...)  
Unique copies of free modules?  
Emacs UI: use "warning colour" (...)  
MakeSet can be very slow  
eval: in which ring should the (...)  
use command, ring syntax, RingOf  
Ring ID: separate index values (...)  
Emacs UI: endfunc does not indent (...)  
Emacs UI: C-c C-\ copies line cursor (...)  
NUL char in input terminates CoCoA-5  
Emacs UI: swapped splitting  
Credits to CoCoA-5 contributors  
Add more operations for modules  
External Libs: missing dependencies (...)  
External libs: specifying I/O streams (...)  
Primary Decomposition in CoCoA-5  
Elementary transcendental functions (...)  
IsDefined does not follow reference (...)  
New function: LeastDegPolynomial (...)  
CoCoA type "cone"  
Emacs UI: send-region and send-line (...)  
floor, ceil, and NearestInt for (...)  
append has bad complexity  
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  
New Fn: make a homogeneous list (...)  
LinearSimplify: sometimes not optimal  
Matrixrow-functions  
Create a directory  
Emacs UI: open manual pages in (...)



**Clean up package points.cpkg**

**User forum?**

**Windows: Qt-Gui does not link correctly**

**Daft slug**