

|   | 2024-11 |    |    |    | 2024-12 |    |    |    | 2025-1 |   |   |   | 2025-2 |   |   |   | 2025-3 |    |    |    | 2025-4 |    |    |    |    |  |  |
|---|---------|----|----|----|---------|----|----|----|--------|---|---|---|--------|---|---|---|--------|----|----|----|--------|----|----|----|----|--|--|
|   | 45      | 46 | 47 | 48 | 49      | 50 | 51 | 52 | 1      | 2 | 3 | 4 | 5      | 6 | 7 | 8 | 9      | 10 | 11 | 12 | 13     | 14 | 15 | 16 | 17 |  |  |
| CoCoA<br>Web site: mailto link for bugs, suggestions (...)<br>Look of first Redmine page linked from CoCoA (...)<br>ApCoCoA<br>New ApCoCoA UI<br>Interactive window and history mechanism<br>Input tabbed windows associated to files<br>ApCoCoA projects<br>ApCoCoA: separate window for manual<br>How to connect GUI to cocoa5 executable?<br>CoCoA-5<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) | CoCoA-5 |    |    |    |         |    |    |    |        |   |   |   |        |   |   |   |        |    |    |    |        |    |    |    |    |  |  |

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 (...)  
 Speed of some Normaliz calls (NmzComputation)  
 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?

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| <p> <b>CoeffOfTerm: in CoCoALibSupplement</b><br/> <b>Man page for UniversalGBasis</b><br/> <b>Add sagbi package</b><br/> <b>Emacs: avoid making buffer visible (...)</b><br/> <b>subst: not checking args properly</b><br/> <b>DivAlg slower than NR</b><br/> <b>elim for modules</b><br/> <b>Geometrical theorem proving package</b><br/> <b>RMap and image: obsolescent?</b><br/> <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> </p> |  |
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| <p> NewPolyRing with indices -- better (...)<br/> Continued fraction: arg type RAT (...)<br/> GenReprCompute: SERIOUS ERROR<br/> Do not use random inside tests!!<br/> Makefile problem: needlessly relinks (...)<br/> Manual: why doesn't "?Commands (...)<br/> AsINT, AsRAT could also take a (...)<br/> Recover old benchmarks for GBasis<br/> CoCoA-5 - CoCoA-5.4.4<br/> Approximate BuchbergerMoeller: (...)<br/> CoCoAManual: General part of the (...)<br/> Emacs UI: keywords in multiline (...)<br/> Emacs UI: send-file (C-c C-f) should (...)<br/> Manual: remove old stuff about (...)<br/> Revive old CoCoA4 package called (...)<br/> Emacs UI: slow with long lines<br/> Poor memory management?<br/> Disable readline if input is redirected<br/> SLUG: RationalSolve slow and stupid<br/> Add CoCoA5 function NmzHilbertBasisKer<br/> BuiltinOneLiners -- less precise (...)<br/> CantStop playing CantStop<br/> Unexpected or unhelpful error using (...)<br/> Refine Poset impl &amp; doc<br/> Verbosity level in CoCoA5<br/> EvalPolyAtMat<br/> Make it easy to run the tests in (...)<br/> Better error mesg for 1.2.3.4?<br/> CoCoA web site "analytics"<br/> Difference between seealso and (...)<br/> Add CoCoA-5 syntax: syz(&lt;F,&gt; list (...)<br/> New function ModuleElems? (like (...)<br/> CoCoA-5 - CoCoA-5.?.?<br/> (short) manual for emacs interface </p> |  |
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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

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| <p>Emacs UI: indentation is wrong (...)</p> <p>Eliminate keyword Alias?</p> <p>gcd too slow for large degree univariate (...)</p> <p>Unique copies of rings in CoCoA-5</p> <p>Warning about variable hiding another (...)</p> <p>ScalarProduct accepts MatrixRow?</p> <p>Cleaning: Cruft in CoCoA-5 packages</p> <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: gutting 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(MODULELEM,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> |  |
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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)



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| <p> Port RowMat, ColMat, MatByRows,... (...)<br/> Generic Timeout for CoCoA-5?<br/> Latex: matrix<br/> New function: gin for algebraic (...)<br/> CoCoA should read unicode<br/> Allow Interruption of printing?<br/> incr and decr are slow<br/> New Fn: make a homogeneous list (...)<br/> LinearSimplify: sometimes not optimal<br/> Matrixrow-functions<br/> Create a directory<br/> Emacs UI: open manual pages in (...)<br/> Clean up package points.cpkg<br/> User forum?<br/> Windows: Qt-Gui does not link correctly<br/> Daft slug </p> <p>CoCoALib</p> <p>CoCoALib - CoCoALib-0.99880</p> <p> Matrix equation solving; linear (...)<br/> Improve threadsafety<br/> Matrix equation solving: LinKer<br/> Printing polynomials - spaces between (...)<br/> Play with GIT<br/> Error: ERR::NotNonZero instead (...)<br/> Elim(vector&lt;long&gt;) as PPOrderingCtor<br/> Syzygy for modules: non-homogeneous (...)<br/> Error codes: use same code for (...)<br/> LongRange: in which file should (...)<br/> Impl small non-prime finite fields (...)<br/> DistrMPolyClean does not use MemPool (...)<br/> MatrixOrderingMod32749Impl: test (...)<br/> Update normaliz interface?<br/> Better errors: give supplementary (...)<br/> SLUG: elimination </p> | <p>CoCoALib</p> |
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| <p> Test whether a symbol is in a ring<br/> DivMask: extend interface?<br/> Implement "elim" in CoCoALib<br/> Cleanup MinPoly code<br/> implicit, ImplicitHypersurface: (...)<br/> Redesign ideals<br/> LinSolve for matrices over FFp<br/> strict enum types: C++11 extension<br/> New function: cardinality of finite (...)<br/> FlagManager for bool/bool3 flags<br/> MachineInt or long for args which (...)<br/> Separate configure scripts for (...)<br/> MachineInt: change semantics?<br/> IsRadical for ideal?<br/> New function: multiplicity and (...)<br/> Improve saturate<br/> Slug: Polynomial ring constructor (...)<br/> CoCoALib - CoCoALib-0.99900<br/> Redmine Administration<br/> Design new errors using inheritance<br/> Which names to use? Intersection/saturation (...)<br/> New function: IdealWithIncrementalGBasis(l, (...)<br/> Documentation: translation table<br/> CoCoALib - CoCoALib-1.0<br/> Sort out RingElem, RefRingElem, (...)<br/> List of all functions in CoCoALib<br/> printing polynomials<br/> keywords in documentation<br/> Cleanup header for ring classes (...)<br/> Error Codes<br/> automatic creation of all function (...)<br/> Introduce PartialHom<br/> Ideals of polynomials<br/> LT over QQ: surprisingly slow </p> |  |
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IdealOfPoints with generic coeffs  
 New datastructures directory  
 Convert DUPFF code to C++  
 Better GCD  
 Design problem in ideals  
 Convenience ring ctors and homs  
 Buchberger-Moeller (parent task)  
     Buchberger-Moeller: fast modular (...)  
     Buchberger-Moeller: impl via (...)  
 Buchberger-Moeller: input conversions  
 Makefile dependencies  
 RingOf rather than owner? (and (...)  
 Iterated CanonicalHom  
 GCD normalization (e.g. monic)  
 Convert old "task table" into redmine  
 IsStdGraded: add for PPOrdering, (...)  
 PPWithMask needs checking  
 Example for change of coordinates (...)  
 HilbertBasis from Normaliz: full-lattice (...)  
 Generator for random ring elements  
 Documentation for QBGenerator needs (...)  
 No test for QBGenerator  
 Approx QIR  
 Transcribe C4 code for GCD in QQ[x]  
 Multivariate lifting  
 Move the various <matrix>::mySetEntry (...)  
 Forward declarations  
 Eliminate class RefPPMonoidElem?  
 Store unique copy of FF(p) in GlobalManager  
 Global setting: to use IsProbPrime (...)  
 PrimeField -- new fn?  
 Modules design: brainstorming  
 Compilation on M\$Windows: Visual (...)  
 FreeModule: unique copy?

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| <p>Add doc for ApproxPts2</p> <p>submodule constructor different (...)</p> <p>C++ nasty surprises</p> <p>Why is DMPI slower than DMPClean?</p> <p>Module homs</p> <p>Missing documentation and tests (...)</p> <p>CoCoAServer: what future, what (...)</p> <p>Resolution/morse: integrate Mario (...)</p> <p>add resolution data type</p> <p>implement algorithm(s) for resolutions</p> <p>PPMonoidElemAlias: redesign PPMonoidElem (...)</p> <p>add myHilbertSeries member field (...)</p> <p>add myJBMill member field to ideal</p> <p>NewFreeModule of dimension 0</p> <p>Minimal syzygies (optimized implementation)</p> <p>Allow user to give a name to a (...)</p> <p>Error names and error messages (...)</p> <p>Semantics of IsPrintedWithMinus</p> <p>Improve UPoly eval at BigRat for (...)</p> <p>MemPool: order free blocks?</p> <p>Polynomial multiplication (product (...)</p> <p>Port RealRoots to C++</p> <p>Eigenvectors</p> <p>Which sets of generators in an (...)</p> <p>LinearSimplify: port to CoCoALib</p> <p>Unique copies of rings -- smart (...)</p> <p>Clang: automatic bug finding</p> <p>Documentation: write doc for RingDenseUPolyClean</p> <p>Quick/correct flag for bool3 fns</p> <p>Fn to "flatten" muliple polynomial (...)</p> <p>Make squarefreefactor work in multiple (...)</p> <p>FloatStr uses too much memory</p> <p>Functions to clean up a factorization</p> <p>elim using RingTwinFloat triggers (...)</p> |  |
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add myResolution member field (...)  
Reconsider overloaded virtual mem (...)  
Subrings  
Temporary file for experimentation  
FloatApprox for TwinFloat values?  
Documentation for ReductionCog  
Allow use of RingElem instead of (...)  
Split SparsePolyRing.H into two (...)  
Investigate using cmake for configuration  
New function for printing with (...)  
Implement gin (generic initial (...)  
Problem with template instantiation (...)  
configure: check all libraries (...)  
Redesign CRTMill  
Wikipedia  
Gaussian integer and rationals (...)  
Complex twin-floats  
Shadow CoCoA namespace to help (...)  
What is test-Dynamic1.C  
Buchberger-Moeller: add option (...)  
Unique copies of free modules?  
Optimized algorithms for implicitization (...)  
Laurent polynomials  
Integrate Janet/Pommaret basis (...)  
factor: multivariate + finite characteristic  
Matrix determinant over multivariate (...)  
Credits to CoCoALib contributors  
Accumulator (like a geobucket)  
MemPool: make it easier to get (...)  
PPMonoid: add fn to check for overflow (...)  
Use DivMask inside QBGenerator  
myAddMul in poly rings  
PolyAlgebraHom (PolyRingHom) evaluate (...)  
Fault tolerant rational reconstruction: (...)

Remove cruft from test files  
 Add more operations between modules (...)  
 Example database: Slow ideal equality (...)  
 Noncommutative algebra "of solvable" (...)  
 Betti numbers, betti diagram  
 Extend homomorphism to polynomial (...)  
 Addition of sparse (multivariate) (...)  
 View PP exponent vector (and order (...)  
 Problem with GBasis in tower of (...)  
 Investigate using Boost.build instead (...)  
 configure: have option to say to (...)  
 GlobalManager: initialization compatible (...)  
 ExternalLib-CDD: (needed by GFan)  
 CoCoALib cone  
 PPMonoid with 1 extra "exponent"?  
 CRTMill::myAddInfo accept modulus (...)  
 Makefile: problem not seeing when (...)  
 GroebnerFan/ExternalLib-GFan: improve (...)  
 threadsafety: Scott Meyers's advice (...)  
 finite fields: global register (...)  
 Remove refcounts from RingElem?  
 No doc for DistrMPolyInIFpPP  
 Clean code for DistrMPolyClean  
 SmallFpImpl: make it faster  
 vector of "indets" in each PPMonoid?  
 PPOrdering: use it to compute WDeg?  
 Alg Extn by non-zero dim ideal  
 FastCmp for degree -- useful?  
 PPMonoid pseudo-ctor without explicit (...)  
 GenRepr in CoCoALib?  
 F5 with 3 args?  
 Sparse matrices  
 MachineInt: function for checking (...)  
 Generalize grading matrix

UIBC: need include file in RingWeyl.C  
 Make Mario's new code threadsafe  
 factor is very slow on some simple (...)

Differential algebra  
 SparsePolyIter: make more compatible (...)

GINV: alex basis  
 NewPolyRing: tidy up the many different (...)

PPMonoidSparse: comparisons are (...)

IsIrred: correct design?

SmallFpImpl: different repr for (...)

bool3: add some logical operations?

factor: too slow on largish multivariate (...)

Impl faster multiplication for (...)

DistrMPolyInIPP::myPushFront and (...)

IsIrred3: fast 3-way irred test (...)

myIsEqual, myCmp: direct comparisons (...)

SmallFpDouble: which impl of InvMod (...)

External libraries: keep copy of (...)

Read input from SymbolicData database

New function: quorem for univariate (...)

Hilbert Driven GBasis

Design GBMill

Fn to read symbol range (SymbolRange)

Documentation: check layout of (...)

Printing TwinFloat as (rational) (...)

Slow NF example

Weights in ElimMat?

ex-PolyIterator

QIR/RealRootRefine: improve behaviour (...)

GFan: require version newer than (...)