

## CoCoA-5 - Issues

| #    | Project | Parent task | Priority | Subject   | Assignee | Updated           | Category                     | % Done |
|------|---------|-------------|----------|---|----------|-------------------|------------------------------|--------|
| 1593 | CoCoA-5 |             | Normal   | CanonicalHom  |          | 07 May 2021 08:20 |                              | 0      |
| 1304 | CoCoA-5 |             | Low      | Hermite normal form   |          | 29 Aug 2019 14:43 |                              | 0      |
| 1175 | CoCoA-5 |             | Normal   | intersection  |          | 05 Apr 2018 09:29 |                              | 0      |
| 770  | CoCoA-5 |             | Normal   | CoCoA type "cone"   |          | 22 May 2017 14:12 |                              | 0      |
| 633  | CoCoA-5 |             | Normal   | New operations? ScalarProduct(MODULELEM,LIST), MATRIX * MODULELEM |          | 17 Mar 2017 10:55 |                              | 0      |
| 453  | CoCoA-5 |             | Normal   | Automatic conversion from INT (or RAT) to RINGELEM                |          | 02 Sep 2014 11:15 |                              | 20     |
| 422  | CoCoA-5 |             | Normal   | Bug or feature for protected name? (Use command)                  |          | 04 Apr 2014 15:09 |                              | 0      |
| 421  | CoCoA-5 |             | Normal   | Allow user to give a name to a ring (in C5)                       |          | 18 Jul 2014 15:05 |                              | 10     |
| 230  | CoCoA-5 |             | Normal   | More curiously slow code -- squaring a polynomial                 |          | 04 Apr 2014 15:10 |                              | 0      |
| 1794 | CoCoA-5 |             | Normal   | Strange bug: demo-Osaka2015                                       |          | 19 Apr 2024 22:10 | bug                          | 70     |
| 1639 | CoCoA-5 |             | Normal   | RealRoots: crashes after interrupting                             |          | 07 Dec 2021 20:26 | bug                          | 0      |
| 1604 | CoCoA-5 |             | Normal   | SqFreeFactor crashes over non-perfect field                       |          | 28 Sep 2022 15:00 | bug                          | 10     |
| 1574 | CoCoA-5 |             | Normal   | ApproxSolveTF   |          | 24 Sep 2021 22:29 | bug                          | 0      |
| 1552 | CoCoA-5 |             | Normal   | subst: not checking args properly                                 |          | 03 Feb 2022 19:07 | bug                          | 0      |
| 1406 | CoCoA-5 |             | Normal   | Poor memory management?   |          | 15 Jan 2024 19:51 | bug                          | 0      |
| 1229 | CoCoA-5 |             | Normal   | append is slow  |          | 04 Nov 2021 20:28 | bug                          | 0      |
| 1679 | CoCoA-5 |             | Normal   | BuiltinFunctions-GFan includes normaliz!?                         |          | 20 Apr 2022 21:49 | Cleaning                     | 0      |
| 1648 | CoCoA-5 |             | Normal   | ApproxSolve and RationalSolve take different input                |          | 03 Feb 2022 19:08 | Cleaning                     | 0      |
| 1351 | CoCoA-5 |             | Normal   | Clean up package points.cpkg                                      |          | 25 Oct 2019 13:34 | Cleaning                     | 0      |
| 1192 | CoCoA-5 |             | Normal   | RealRoots: rational roots (but not binary rational roots)         |          | 04 Nov 2021 20:29 | Cleaning                     | 0      |
| 989  | CoCoA-5 |             | Normal   | init file obligatory?   |          | 01 Dec 2016 11:36 | Cleaning                     | 10     |
| 491  | CoCoA-5 |             | Normal   | Cleaning: Cruft in CoCoA-5 packages                               |          | 25 Jul 2018 14:26 | Cleaning                     | 20     |
| 480  | CoCoA-5 |             | Normal   | gcd too slow for large degree univariate poly                     |          | 30 Oct 2019 22:44 | Cleaning                     | 0      |
| 477  | CoCoA-5 |             | Normal   | Eliminate keyword Alias?  |          | 04 Apr 2014 14:31 | Cleaning                     | 0      |
| 465  | CoCoA-5 |             | Normal   | Emacs UI; remove cruft  |          | 13 Nov 2020 11:17 | Cleaning                     | 0      |
| 1564 | CoCoA-5 |             | Normal   | Geometrical theorem proving package                               |          | 19 Jan 2021 09:20 | CoCoA-4 function to be added | 0      |
| 977  | CoCoA-5 |             | Normal   | "universal denominator" (related with GroebnerFanIdeals)          |          | 03 Feb 2022 19:11 | CoCoA-4 function to be added | 20     |
| 960  | CoCoA-5 |             | Normal   | New function: IdealAndSeparatorsOfPoints                          |          | 02 Nov 2016 18:06 | CoCoA-4 function to be added | 0      |
| 487  | CoCoA-5 |             | Normal   | ScalarProduct accepts MatrixRow?                                  |          | 18 Jun 2019 15:22 | CoCoA-4 function to be added | 0      |
| 171  | CoCoA-5 |             | High     | Negate LIST, MAT,...  |          | 04 Apr 2014 16:27 | CoCoA-4 function to be added | 0      |

| #    | Project | Parent task | Priority | Subject   | Assignee | Updated           | Category              | % Done |
|------|---------|-------------|----------|---|----------|-------------------|-----------------------|--------|
| 1806 | CoCoA-5 |             | Normal   | New function ModuleElms? (like RingElms(RING, STRING))                                      |          | 26 Mar 2024 13:44 | CoCoA-5 function: new | 0      |
| 1732 | CoCoA-5 |             | Normal   | EvalPolyAtMat   |          | 28 Mar 2023 16:35 | CoCoA-5 function: new | 0      |
| 1659 | CoCoA-5 |             | Normal   | Jordan Normal Form?   |          | 07 Feb 2022 17:57 | CoCoA-5 function: new | 0      |
| 1644 | CoCoA-5 |             | Normal   | Allow user to choose whether to print finite field elms as symm residues or non-neg residue |          | 03 Feb 2022 19:15 | CoCoA-5 function: new | 10     |
| 1541 | CoCoA-5 |             | Normal   | foreach with ref to list entry?   |          | 15 Jan 2024 19:39 | CoCoA-5 function: new | 0      |
| 1535 | CoCoA-5 |             | Normal   | New functions: argmin, argmax   |          | 26 Nov 2020 15:52 | CoCoA-5 function: new | 10     |
| 1476 | CoCoA-5 |             | Normal   | Lin alg with polys  |          | 06 Aug 2020 15:03 | CoCoA-5 function: new | 0      |
| 1469 | CoCoA-5 |             | Normal   | Get indexed indets from a polyring  |          | 19 Jan 2021 12:39 | CoCoA-5 function: new | 0      |
| 1305 | CoCoA-5 |             | Normal   | Create a directory  |          | 02 Sep 2019 16:31 | CoCoA-5 function: new | 10     |
| 1285 | CoCoA-5 |             | Normal   | New Fn: make a homogeneous list of ringelem   |          | 23 May 2019 11:53 | CoCoA-5 function: new | 0      |
| 993  | CoCoA-5 |             | Normal   | New function: RingQQi()? extension of QQ with imaginary unit                                |          | 13 Nov 2017 15:05 | CoCoA-5 function: new | 0      |
| 980  | CoCoA-5 |             | Normal   | CoeffSize: function to measure the size of coeffs in a poly                                 |          | 28 Nov 2023 22:29 | CoCoA-5 function: new | 20     |
| 753  | CoCoA-5 |             | Normal   | New function: LeastDegPolynomial (LDP)  |          | 30 Jul 2015 17:29 | CoCoA-5 function: new | 0      |
| 737  | CoCoA-5 |             | Low      | Elementary transcendental functions (sin, cos, tan, log, exp)                               |          | 20 Mar 2017 09:00 | CoCoA-5 function: new | 50     |
| 731  | CoCoA-5 |             | Normal   | Primary Decomposition in CoCoA-5  |          | 02 Oct 2017 13:30 | CoCoA-5 function: new | 10     |
| 626  | CoCoA-5 |             | Normal   | Output Betti numbers  |          | 17 Sep 2014 13:11 | CoCoA-5 function: new | 0      |
| 578  | CoCoA-5 |             | Normal   | Gaussian Elimination  |          | 15 May 2020 10:26 | CoCoA-5 function: new | 10     |
| 492  | CoCoA-5 |             | Normal   | New C5 fn for adjusting the warning level   |          | 22 Jul 2014 12:38 | CoCoA-5 function: new | 0      |
| 483  | CoCoA-5 |             | Normal   | Unique copies of rings in CoCoA-5   |          | 04 Apr 2014 16:42 | CoCoA-5 function: new | 0      |
| 451  | CoCoA-5 |             | Normal   | Port function NewSymbol/NewSymbols to CoCoA-5   |          | 09 Nov 2015 15:29 | CoCoA-5 function: new | 10     |
| 242  | CoCoA-5 |             | Normal   | CoCoA-5 Projects for students (e.g. crediti F and tesi)                                     |          | 21 Oct 2022 15:53 | CoCoA-5 function: new | 10     |
| 235  | CoCoA-5 |             | Normal   | Add LucasTest to cocoa5?  |          | 04 Apr 2014 16:38 | CoCoA-5 function: new | 0      |
| 216  | CoCoA-5 |             | Normal   | Janet Bases: port function into CoCoA-5   |          | 05 Nov 2021 16:12 | CoCoA-5 function: new | 20     |
| 1551 | CoCoA-5 |             | Low      | Emacs: avoid making buffer visible in 2 "windows"?  |          | 19 Apr 2021 14:11 | EmacsUI               | 0      |
| 1486 | CoCoA-5 |             | Low      | Emacs UI: indentation in a package  |          | 12 Nov 2021 11:19 | EmacsUI               | 10     |
| 1432 | CoCoA-5 |             | Normal   | Emacs UI: cocoa5-shell-check-process vs. process-status                                     |          | 05 Nov 2021 16:32 | EmacsUI               | 0      |
| 1363 | CoCoA-5 |             | Normal   | Emacs UI: slow with long lines  |          | 15 Jan 2024 19:32 | EmacsUI               | 10     |
| 1076 | CoCoA-5 |             | Low      | EmacsUI: interrupt copies line cursor is on to bottom then interrupts                       |          | 12 Jun 2017 18:27 | EmacsUI               | 0      |
| 772  | CoCoA-5 |             | Low      | Emacs UI: send-region and send-line make sense inside a cpkg5 file?                         |          | 08 Sep 2015 12:49 | EmacsUI               | 20     |
| 727  | CoCoA-5 |             | Low      | Emacs UI: send-file (C-c C-f) should check if buffer and file are synchronized              |          | 05 May 2024 18:54 | EmacsUI               | 10     |

| #    | Project | Parent task | Priority | Subject   | Assignee | Updated           | Category            | % Done |
|------|---------|-------------|----------|---|----------|-------------------|---------------------|--------|
| 663  | CoCoA-5 |             | Low      | Emacs UI: C-c C-\ copies line cursor is on                                  |          | 04 Feb 2015 13:19 | EmacsUI             | 0      |
| 660  | CoCoA-5 |             | Low      | Emacs UI: endfunc does not indent the line                                  |          | 04 Mar 2020 22:06 | EmacsUI             | 0      |
| 653  | CoCoA-5 |             | Low      | Emacs UI: use "warning colour" for an unmatched */                          |          | 04 Dec 2014 15:39 | EmacsUI             | 0      |
| 469  | CoCoA-5 |             | Low      | Emacs UI: keywords in multiline comments                                    |          | 15 Jan 2024 19:49 | EmacsUI             | 20     |
| 468  | CoCoA-5 |             | Low      | Emacs UI: indentation is wrong after ?keyword                               |          | 17 Apr 2014 18:47 | EmacsUI             | 0      |
| 448  | CoCoA-5 |             | Low      | EmacsUI Source/SourceRegion produce warning on Microsoft Windows 7 Ultimate |          | 03 Feb 2022 19:51 | EmacsUI             | 0      |
| 434  | CoCoA-5 |             | Normal   | Emacs UI: very slow when input file is big (with long lines)                |          | 09 Apr 2014 15:52 | EmacsUI             | 0      |
| 148  | CoCoA-5 |             | Normal   | C-c C-p in emacs goes to wrong line   |          | 06 Oct 2022 20:15 | EmacsUI             | 20     |
| 1772 | CoCoA-5 |             | Normal   | Continued fraction: arg type RAT or RAT/INT?                                |          | 28 Nov 2023 22:17 | enhancing/improving | 0      |
| 1752 | CoCoA-5 |             | Normal   | Make it easy to run the tests in a public/distrib version                   |          | 06 Jul 2023 12:14 | enhancing/improving | 0      |
| 1747 | CoCoA-5 |             | Normal   | NewPolyRing with indices -- better interface?                               |          | 29 Jun 2023 18:09 | enhancing/improving | 0      |
| 1728 | CoCoA-5 |             | Normal   | Refine Poset impl & doc   |          | 21 Mar 2023 03:33 | enhancing/improving | 10     |
| 1722 | CoCoA-5 |             | Low      | Daft slug   |          | 27 Feb 2023 12:57 | enhancing/improving | 20     |
| 1671 | CoCoA-5 |             | Normal   | Refactor C++ impl in OnlineHelp   |          | 11 Mar 2024 07:56 | enhancing/improving | 0      |
| 1638 | CoCoA-5 |             | Normal   | MinSubsetOfGens sometimes very slow   |          | 06 Dec 2021 20:37 | enhancing/improving | 0      |
| 1634 | CoCoA-5 |             | Normal   | Unexpected or unhelpful error using GroebnerFanIdeals                       |          | 05 May 2024 19:12 | enhancing/improving | 10     |
| 1631 | CoCoA-5 |             | Normal   | Use filesystem::path instead of string (packageDir, CoCoAManFileName)       |          | 14 Jan 2022 10:27 | enhancing/improving | 0      |
| 1624 | CoCoA-5 |             | Normal   | CantStop playing CantStop   |          | 15 Jan 2024 19:55 | enhancing/improving | 0      |
| 1622 | CoCoA-5 |             | Normal   | BuiltinOneLiners -- less precise location in error messages                 |          | 18 Mar 2024 21:16 | enhancing/improving | 0      |
| 1583 | CoCoA-5 |             | Normal   | New fn ElapsedTimeFrom?   |          | 18 Mar 2024 21:27 | enhancing/improving | 0      |
| 1581 | CoCoA-5 |             | Normal   | Slow sqfr: rad(f)   |          | 12 Oct 2021 09:22 | enhancing/improving | 0      |
| 1578 | CoCoA-5 |             | Normal   | SLUG: RationalSolve slow and stupid   |          | 15 Jan 2024 19:27 | enhancing/improving | 0      |
| 1560 | CoCoA-5 |             | Normal   | elim for modules  |          | 03 Feb 2022 19:55 | enhancing/improving | 0      |
| 1545 | CoCoA-5 |             | Low      | CoeffOfTerm: in CoCoALibSupplement  |          | 11 Dec 2020 12:30 | enhancing/improving | 20     |
| 1533 | CoCoA-5 |             | Low      | RingElem and IndetSymbols not compatible                                    |          | 06 Nov 2020 13:56 | enhancing/improving | 10     |
| 1519 | CoCoA-5 |             | Normal   | Interpreter fn Value::from can use std::move?                               |          | 03 Feb 2022 19:54 | enhancing/improving | 0      |
| 1508 | CoCoA-5 |             | Normal   | Initial ring  |          | 05 May 2024 20:17 | enhancing/improving | 50     |
| 1503 | CoCoA-5 |             | Normal   | More flexible ring creation syntax (after use or ::=)                       |          | 08 Oct 2020 14:16 | enhancing/improving | 0      |
| 1496 | CoCoA-5 |             | Low      | Use "special" names for variables inside tests                              |          | 05 May 2024 19:53 | enhancing/improving | 20     |
| 1475 | CoCoA-5 |             | Normal   | HilbertSeries: make into proper rational function                           |          | 03 Feb 2022 19:54 | enhancing/improving | 0      |
| 1429 | CoCoA-5 |             | Normal   | Stack overflow reading long list (SEGV)                                     |          | 19 Apr 2021 14:14 | enhancing/improving | 0      |

| #    | Project | Parent task | Priority | Subject  | Assignee | Updated           | Category            | % Done |
|------|---------|-------------|----------|--|----------|-------------------|---------------------|--------|
| 1425 | CoCoA-5 |             | Normal   | MakeTerm: implement in C++   |          | 03 Feb 2022 19:22 | enhancing/improving | 0      |
| 1403 | CoCoA-5 |             | Normal   | RingID: remove this function?  |          | 24 Jan 2020 21:20 | enhancing/improving | 10     |
| 1313 | CoCoA-5 |             | Normal   | Automatic conversion from RINGELEM to INT  |          | 03 Feb 2022 19:21 | enhancing/improving | 0      |
| 1296 | CoCoA-5 |             | Normal   | Matrixrow-functions  |          | 18 Jun 2019 15:15 | enhancing/improving | 10     |
| 1291 | CoCoA-5 |             | Low      | LinearSimplify: sometimes not optimal  |          | 27 May 2019 21:17 | enhancing/improving | 0      |
| 1275 | CoCoA-5 |             | Low      | incr and decr are slow   |          | 29 Apr 2019 17:53 | enhancing/improving | 0      |
| 1271 | CoCoA-5 |             | Normal   | Allow Interruption of printing?  |          | 17 Apr 2019 10:17 | enhancing/improving | 10     |
| 1262 | CoCoA-5 |             | Normal   | Split BuiltinFunctions-CoCoALib.C into smaller files                             |          | 03 Feb 2022 19:53 | enhancing/improving | 30     |
| 1244 | CoCoA-5 |             | Normal   | MSatLinSolve: req minor improvements   |          | 03 Feb 2022 20:14 | enhancing/improving | 10     |
| 1237 | CoCoA-5 |             | Normal   | ker: for PolyAlgHom from QQ[x,y,z] to QQ(t)                                      |          | 10 Jun 2021 18:06 | enhancing/improving | 0      |
| 1204 | CoCoA-5 |             | Normal   | MinPoly for matrix: fix in cocoalib and export to cocoa5                         |          | 03 Feb 2022 19:21 | enhancing/improving | 0      |
| 1141 | CoCoA-5 |             | Low      | IsInRadical: for monomial ideals   |          | 15 May 2020 10:53 | enhancing/improving | 0      |
| 1129 | CoCoA-5 |             | Normal   | Generic Timeout for CoCoA-5?   |          | 28 Nov 2017 18:06 | enhancing/improving | 10     |
| 1071 | CoCoA-5 |             | Normal   | LinKerBasis is user-unfriendly   |          | 03 Feb 2022 19:54 | enhancing/improving | 10     |
| 1068 | CoCoA-5 |             | Normal   | PolyRing constructor: NewOrdVArith computed twice                                |          | 21 Mar 2024 11:55 | enhancing/improving | 10     |
| 1041 | CoCoA-5 |             | Normal   | Separators for elements of a list  |          | 04 Jan 2024 10:14 | enhancing/improving | 10     |
| 1034 | CoCoA-5 |             | Low      | Improve error message when args to (infix operator) IsIn have incompatible types |          | 17 Mar 2017 13:19 | enhancing/improving | 0      |
| 1025 | CoCoA-5 |             | Normal   | Example of slow LEX GBasis computation   |          | 15 Nov 2017 14:57 | enhancing/improving | 10     |
| 1003 | CoCoA-5 |             | Normal   | New syntax for creating poly rings?  |          | 27 Jan 2017 15:54 | enhancing/improving | 10     |
| 984  | CoCoA-5 |             | Normal   | GroebnerFanIdeals: order matrices sometimes have "large" entries                 |          | 22 Nov 2021 20:19 | enhancing/improving | 0      |
| 941  | CoCoA-5 |             | Normal   | Improve coverage of CoCoA-5 tests  |          | 10 Oct 2016 21:09 | enhancing/improving | 0      |
| 917  | CoCoA-5 |             | Normal   | CallOnGroebnerFanIdeals: better to use an iterator (or a "stream")               |          | 26 Nov 2016 17:46 | enhancing/improving | 0      |
| 916  | CoCoA-5 |             | Normal   | use command: unhelpful error if you use := instead of ::=                        |          | 20 Oct 2020 17:50 | enhancing/improving | 0      |
| 888  | CoCoA-5 |             | Normal   | Escaped newline to allow a long line to be split into several "physical lines"   |          | 07 Jun 2016 00:26 | enhancing/improving | 0      |
| 879  | CoCoA-5 |             | Normal   | LOGAR: make CoCoA-5 easier to use  |          | 09 May 2016 15:30 | enhancing/improving | 0      |
| 876  | CoCoA-5 |             | Normal   | subst: allowed also for indets in the coeff ring                                 |          | 07 May 2016 13:59 | enhancing/improving | 0      |
| 875  | CoCoA-5 |             | Normal   | Interpreter is too slow reading a big polynomial                                 |          | 20 Oct 2020 18:05 | enhancing/improving | 10     |
| 862  | CoCoA-5 |             | Normal   | append has bad complexity  |          | 05 Apr 2016 13:40 | enhancing/improving | 0      |
| 857  | CoCoA-5 |             | Low      | floor, ceil, and NearestInt for RingElem in CoCoA-5?                             |          | 21 Feb 2019 09:17 | enhancing/improving | 0      |
| 723  | CoCoA-5 |             | Normal   | Referring to indets with multiple indices from a polyring                        |          | 12 Feb 2021 12:16 | enhancing/improving | 0      |
| 716  | CoCoA-5 |             | Low      | NotBuiltin.cpkg5: indent for MODULE  |          | 06 Oct 2022 20:00 | enhancing/improving | 10     |

| #    | Project | Parent task | Priority  | Subject   | Assignee | Updated           | Category             | % Done |
|------|---------|-------------|-----------|---|----------|-------------------|----------------------|--------|
| 659  | CoCoA-5 |             | Low       | Ring ID: separate index values for "system created rings"?                    |          | 23 Jan 2015 14:11 | enhancing/improving  | 0      |
| 657  | CoCoA-5 |             | Low       | use command, ring syntax, RingOf  |          | 20 Jan 2015 20:32 | enhancing/improving  | 0      |
| 656  | CoCoA-5 |             | Normal    | eval: in which ring should the result be?                                     |          | 20 Jan 2015 20:25 | enhancing/improving  | 0      |
| 655  | CoCoA-5 |             | Normal    | MakeSet can be very slow  |          | 20 Jan 2015 17:12 | enhancing/improving  | 0      |
| 646  | CoCoA-5 |             | Normal    | Unique copies of free modules?  |          | 10 Nov 2014 16:42 | enhancing/improving  | 0      |
| 720  | CoCoA-5 |             | Normal    | External libs: specifying I/O streams (initialization?)                       |          | 22 May 2015 14:14 | External Libs        | 0      |
| 709  | CoCoA-5 |             | High      | Speed of some Normaliz calls (NmzComputation)                                 |          | 03 Feb 2022 19:23 | External Libs        | 10     |
| 1293 | CoCoA-5 |             | Low       | Vim Plugin for CoCoA  |          | 24 Sep 2021 21:47 | GUI                  | 70     |
| 611  | CoCoA-5 |             | Low       | GUI: quitting provokes Imminent Disaster                                      |          | 28 Feb 2024 21:24 | GUI                  | 0      |
| 527  | CoCoA-5 |             | Normal    | GUI: better name for the graphical interface?                                 |          | 27 Jul 2015 19:25 | GUI                  | 0      |
| 299  | CoCoA-5 |             | Low       | GUI: message "running.." (close to output window?)                            |          | 15 May 2020 10:56 | GUI                  | 0      |
| 276  | CoCoA-5 |             | Normal    | TeXmacs interface   |          | 09 Apr 2014 15:01 | GUI                  | 0      |
| 198  | CoCoA-5 |             | Normal    | Appunti per (eventuale) tesi triennale Informatica: CoCoA GUI                 |          | 30 Sep 2022 19:05 | GUI                  | 0      |
| 136  | CoCoA-5 |             | Normal    | GUI: Add an edit menu to the top bar (CoCoA GUI on MacOS)                     |          | 02 Jul 2014 16:56 | GUI                  | 0      |
| 133  | CoCoA-5 |             | Normal    | Qt GUI: Make better distinction between input and output in the output window |          | 12 Mar 2021 09:39 | GUI                  | 0      |
| 38   | CoCoA-5 |             | Normal    | GUI: open file "with C5"  |          | 09 Apr 2014 15:00 | GUI                  | 0      |
| 920  | CoCoA-5 |             | Normal    | Empty matrix: warning, error, or empty matrix?                                |          | 08 Sep 2016 11:45 | Incomplete function  | 10     |
| 100  | CoCoA-5 |             | Normal    | BringIn should map only the indets in its arg                                 |          | 26 Sep 2022 20:25 | Incomplete function  | 0      |
| 1765 | CoCoA-5 |             | Normal    | Difference between seealso and keys?  |          | 16 Oct 2023 20:02 | Manual/documentation | 0      |
| 1741 | CoCoA-5 |             | High      | Documentation/Manual for HilbertFn  |          | 10 May 2023 20:49 | Manual/documentation | 20     |
| 1707 | CoCoA-5 |             | Normal    | User forum?   |          | 01 Nov 2022 22:02 | Manual/documentation | 0      |
| 1686 | CoCoA-5 |             | Normal    | Manual entry for random (see also)  |          | 09 Jun 2022 20:49 | Manual/documentation | 0      |
| 1663 | CoCoA-5 |             | Normal    | GCDList not documented  |          | 31 May 2022 09:55 | Manual/documentation | 0      |
| 1636 | CoCoA-5 |             | Normal    | Missing/Incomplete manual entries   |          | 30 Nov 2023 17:21 | Manual/documentation | 10     |
| 1621 | CoCoA-5 |             | Normal    | Doc for the various BuiltIn files   |          | 18 Oct 2021 11:26 | Manual/documentation | 0      |
| 1534 | CoCoA-5 |             | Immediate | Install CoCoA-5 on MacOS-10.15+   |          | 07 Oct 2022 14:35 | Manual/documentation | 50     |
| 1480 | CoCoA-5 |             | Normal    | Documentation for making ring with parameters                                 |          | 03 Feb 2022 20:18 | Manual/documentation | 0      |
| 1430 | CoCoA-5 |             | Normal    | HTML manual: search using keywords?   |          | 04 Nov 2021 23:17 | Manual/documentation | 0      |
| 1418 | CoCoA-5 |             | Normal    | Manual entry for NewPolyRing  |          | 03 Feb 2022 20:16 | Manual/documentation | 0      |
| 1365 | CoCoA-5 |             | Normal    | Package Edgeldeal not documented  |          | 03 Feb 2022 20:16 | Manual/documentation | 0      |
| 1350 | CoCoA-5 |             | Normal    | CoCoA manual: entry for operators, shortcuts                                  |          | 05 Feb 2022 20:35 | Manual/documentation | 0      |
| 1320 | CoCoA-5 |             | Normal    | CoCoA-5 manual: incorrect empty line in syntax box (in PDF file)              |          | 04 Nov 2021 23:16 | Manual/documentation | 0      |

| #    | Project | Parent task | Priority | Subject   | Assignee | Updated           | Category             | % Done |
|------|---------|-------------|----------|---|----------|-------------------|----------------------|--------|
| 1314 | CoCoA-5 |             | Normal   | Emacs UI: open manual pages in a separate frame?                        |          | 27 Sep 2019 17:23 | Manual/documentation | 10     |
| 1252 | CoCoA-5 |             | Normal   | ShapeLemma: no manual entry   |          | 03 Feb 2022 20:16 | Manual/documentation | 0      |
| 1245 | CoCoA-5 |             | Normal   | Online manual entry for RingElem needs to be improved                   |          | 03 Feb 2022 20:15 | Manual/documentation | 0      |
| 1241 | CoCoA-5 |             | Normal   | GDPR: website, mailing list   |          | 05 Feb 2022 20:34 | Manual/documentation | 0      |
| 1079 | CoCoA-5 |             | Normal   | CoCoAManual: AffHilbertFn accepts also ideal (correct?)                 |          | 08 May 2023 20:44 | Manual/documentation | 20     |
| 1054 | CoCoA-5 |             | Normal   | CoCoAManual: improved search, or improved selection of "see also" pages |          | 28 Apr 2017 11:42 | Manual/documentation | 0      |
| 1031 | CoCoA-5 |             | Normal   | ScalarProduct: exact defn and manual page                               |          | 17 Mar 2017 11:03 | Manual/documentation | 0      |
| 943  | CoCoA-5 |             | Normal   | Managing credits  |          | 16 May 2017 14:49 | Manual/documentation | 10     |
| 912  | CoCoA-5 |             | Urgent   | Add TUTORIALs to online manual  |          | 17 Oct 2022 14:02 | Manual/documentation | 80     |
| 677  | CoCoA-5 |             | Normal   | Credits to CoCoA-5 contributors   |          | 15 Nov 2019 15:28 | Manual/documentation | 0      |
| 323  | CoCoA-5 |             | Normal   | system variables  |          | 04 Apr 2014 17:06 | Manual/documentation | 0      |
| 181  | CoCoA-5 |             | Low      | Functions throwing error even though (trivially) defined                |          | 04 Nov 2021 23:09 | Manual/documentation | 10     |
| 13   | CoCoA-5 |             | Normal   | (short) manual for emacs interface                                      |          | 12 Oct 2016 16:56 | Manual/documentation | 0      |
| 1759 | CoCoA-5 |             | Low      | Better error mesg for 1.2.3.4?  |          | 19 Mar 2024 20:05 | Parser/Interpreter   | 0      |
| 1650 | CoCoA-5 |             | Normal   | Potentially confusing prompt: waiting for semicolon                     |          | 09 May 2024 10:24 | Parser/Interpreter   | 30     |
| 1544 | CoCoA-5 |             | Normal   | CoCoA coding conventions for parser/interpreter?                        |          | 11 Dec 2020 12:01 | Parser/Interpreter   | 10     |
| 1440 | CoCoA-5 |             | Low      | Surprising parser error: INT+DOT+IDENTIFIER                             |          | 04 Nov 2021 23:10 | Parser/Interpreter   | 0      |
| 1435 | CoCoA-5 |             | Low      | Disable readline if input is redirected                                 |          | 05 May 2024 19:03 | Parser/Interpreter   | 0      |
| 1292 | CoCoA-5 |             | Normal   | Interpreter: fns which accept INT or RAT                                |          | 03 Feb 2022 19:33 | Parser/Interpreter   | 0      |
| 1234 | CoCoA-5 |             | Normal   | CoCoA should read unicode   |          | 01 Oct 2019 14:36 | Parser/Interpreter   | 0      |
| 928  | CoCoA-5 |             | Low      | ciao, exit, quit can be used not only at top level                      |          | 18 Oct 2021 11:08 | Parser/Interpreter   | 0      |
| 915  | CoCoA-5 |             | Low      | When is a semicolon needed to end a statement/command?                  |          | 28 Feb 2024 21:27 | Parser/Interpreter   | 0      |
| 749  | CoCoA-5 |             | Normal   | IsDefined does not follow reference to undefined optional param         |          | 31 Jul 2015 12:08 | Parser/Interpreter   | 0      |
| 669  | CoCoA-5 |             | Low      | NUL char in input terminates CoCoA-5                                    |          | 04 Mar 2020 21:28 | Parser/Interpreter   | 0      |
| 597  | CoCoA-5 |             | Normal   | Interpreter.C: remove calls to WrongTypeException                       |          | 02 Mar 2020 21:45 | Parser/Interpreter   | 0      |
| 486  | CoCoA-5 |             | Normal   | Warning about variable hiding another -- too zealous                    |          | 01 Sep 2014 13:55 | Parser/Interpreter   | 0      |
| 435  | CoCoA-5 |             | Normal   | Assignment to protected variable  |          | 04 Apr 2014 17:05 | Parser/Interpreter   | 0      |
| 375  | CoCoA-5 |             | Normal   | allow single function call in "use" : e.g. "Use NewFractionField(R);"   |          | 02 Sep 2014 11:14 | Parser/Interpreter   | 0      |
| 363  | CoCoA-5 |             | Normal   | Colon operator, 2nd arg   |          | 09 Apr 2014 15:07 | Parser/Interpreter   | 0      |
| 183  | CoCoA-5 |             | Low      | Template for unaryMinus?  |          | 25 Jul 2018 17:15 | Parser/Interpreter   | 0      |
| 101  | CoCoA-5 |             | Normal   | rethrow in Try .. UponError .. EndTry                                   |          | 23 Oct 2020 10:18 | Parser/Interpreter   | 0      |
| 97   | CoCoA-5 |             | Normal   | OpenOFile   |          | 05 May 2024 20:44 | Parser/Interpreter   | 0      |

| #    | Project | Parent task | Priority | Subject   | Assignee           | Updated           | Category                     | % Done |
|------|---------|-------------|----------|---|--------------------|-------------------|------------------------------|--------|
| 95   | CoCoA-5 |             | Normal   | Error/warning if fn-proc is neither fn nor proc?                |                    | 15 Jun 2016 14:13 | Parser/Interpreter           | 0      |
| 1146 | CoCoA-5 |             | Low      | Use Flatpak and/or Snap on Linux?                               |                    | 06 Oct 2020 15:55 | Portability                  | 0      |
| 1006 | CoCoA-5 |             | Normal   | External dependencies for building                              |                    | 27 Oct 2021 13:13 | Portability                  | 10     |
| 83   | CoCoA-5 |             | Normal   | C++11 compatibility questions                                   |                    | 03 Feb 2022 19:59 | Portability                  | 40     |
| 1708 | CoCoA-5 |             | Normal   | Linux: just 1 executable, should be 2 (with & without readline) |                    | 05 May 2024 19:15 | Release                      | 0      |
| 1701 | CoCoA-5 |             | Normal   | Preliminary packages  |                    | 18 Mar 2024 21:05 | Release                      | 10     |
| 1688 | CoCoA-5 |             | Normal   | Release CoCoA 5.4.2   |                    | 14 Feb 2023 21:29 | Release                      | 0      |
| 1474 | CoCoA-5 |             | High     | Website: link to JSAG?  |                    | 16 Feb 2022 20:27 | Release                      | 0      |
| 1453 | CoCoA-5 |             | Normal   | Use symbolic links for release files                            |                    | 03 Feb 2022 19:39 | Release                      | 0      |
| 1445 | CoCoA-5 |             | Normal   | Automatic way to produce statically linked CoCoAInterpreter     |                    | 03 Feb 2022 19:38 | Release                      | 0      |
| 1456 | CoCoA-5 |             | Normal   | IntersectList or IntersectionList                               |                    | 15 Mar 2024 18:24 | Renaming                     | 0      |
| 1751 | CoCoA-5 |             | Normal   | Manual of functions vs ManExamples                              | Anna Maria Bigatti | 03 Jul 2023 20:54 |                              | 10     |
| 1586 | CoCoA-5 |             | Normal   | Profiling with clang  | Anna Maria Bigatti | 02 Apr 2021 09:28 |                              | 10     |
| 1781 | CoCoA-5 |             | Urgent   | GenReprCompute: SERIOUS ERROR                                   | Anna Maria Bigatti | 09 Feb 2024 08:16 | bug                          | 90     |
| 1746 | CoCoA-5 |             | Normal   | ManExamples target: need t reset VerbosityLevel                 | Anna Maria Bigatti | 05 May 2024 19:45 | Cleaning                     | 90     |
| 929  | CoCoA-5 |             | Normal   | Clean up CoCoALibSupplement                                     | Anna Maria Bigatti | 03 Feb 2022 19:48 | Cleaning                     | 20     |
| 476  | CoCoA-5 |             | Low      | Review utility of package IO                                    | Anna Maria Bigatti | 03 Feb 2022 19:09 | Cleaning                     | 40     |
| 474  | CoCoA-5 |             | Urgent   | Eliminate package BinRepr                                       | Anna Maria Bigatti | 03 Feb 2022 19:47 | Cleaning                     | 50     |
| 376  | CoCoA-5 |             | Normal   | Hilbert: Redesign hp.cpkg5 and public functions in TmpHilbert.C | Anna Maria Bigatti | 06 Aug 2020 12:21 | Cleaning                     | 10     |
| 1415 | CoCoA-5 |             | Normal   | thmproving package  | Anna Maria Bigatti | 13 Jun 2022 15:31 | CoCoA-4 function to be added | 60     |
| 1246 | CoCoA-5 |             | Urgent   | Revive old CoCoA4 package called "cocoa5.cpkg"                  | Anna Maria Bigatti | 14 Mar 2023 11:58 | CoCoA-4 function to be added | 90     |
| 702  | CoCoA-5 |             | Normal   | Add more operations for modules                                 | Anna Maria Bigatti | 15 May 2015 09:05 | CoCoA-4 function to be added | 0      |
| 614  | CoCoA-5 |             | Normal   | Add functions based on MayerVietorisTree                        | Anna Maria Bigatti | 04 Sep 2014 14:05 | CoCoA-4 function to be added | 10     |
| 512  | CoCoA-5 |             | Normal   | Resurrect MakeCheck()   | Anna Maria Bigatti | 28 Jul 2014 16:20 | CoCoA-4 function to be added | 0      |

| #    | Project | Parent task | Priority | Subject  | Assignee           | Updated           | Category                     | % Done |
|------|---------|-------------|----------|--|--------------------|-------------------|------------------------------|--------|
| 501  | CoCoA-5 |             | 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      |
| 412  | CoCoA-5 |             | Normal   | intersection (all lower case)  | Anna Maria Bigatti | 28 Jul 2014 17:41 | CoCoA-4 function to be added | 20     |
| 388  | CoCoA-5 |             | High     | port optimized resolutions to CoCoA-5                                    | Anna Maria Bigatti | 02 Jul 2014 16:13 | CoCoA-4 function to be added | 0      |
| 368  | CoCoA-5 |             | Normal   | port SmithNormalForm (CoCoA-4)package to CoCoA-5                         | Anna Maria Bigatti | 22 Jan 2024 10:37 | CoCoA-4 function to be added | 10     |
| 175  | CoCoA-5 |             | Normal   | Approximate BuchbergerMoeller: port to CoCoA-5                           | Anna Maria Bigatti | 14 Mar 2023 22:12 | CoCoA-4 function to be added | 70     |
| 78   | CoCoA-5 |             | High     | Elim ordering and matrix ordering in CoCoA-5                             | Anna Maria Bigatti | 28 Mar 2024 07:25 | CoCoA-4 function to be added | 50     |
| 1568 | CoCoA-5 |             | High     | RMap and image: obsolescent?   | Anna Maria Bigatti | 17 Oct 2022 14:04 | CoCoA-4 function: obsolete   | 40     |
| 1596 | CoCoA-5 |             | Normal   | Add CoCoA5 function NmzHilbertBasisKer                                   | Anna Maria Bigatti | 14 Mar 2023 14:59 | CoCoA-5 function: new        | 80     |
| 1549 | CoCoA-5 |             | Normal   | Add sagbi package  | Anna Maria Bigatti | 18 Feb 2022 16:18 | CoCoA-5 function: new        | 10     |
| 1372 | CoCoA-5 |             | Normal   | New function: find ?   | Anna Maria Bigatti | 04 Nov 2021 23:01 | CoCoA-5 function: new        | 10     |
| 1153 | CoCoA-5 |             | Normal   | New function: gin for algebraic extensions                               | Anna Maria Bigatti | 25 Jul 2018 15:36 | CoCoA-5 function: new        | 0      |
| 1107 | CoCoA-5 |             | Normal   | CoCoA Online: install (using InteractiveShell)                           | Anna Maria Bigatti | 16 Oct 2017 16:54 | CoCoA-5 function: new        | 10     |
| 964  | CoCoA-5 |             | Normal   | New function: MakeMultiset?  | Anna Maria Bigatti | 25 Jul 2018 15:35 | CoCoA-5 function: new        | 0      |
| 274  | CoCoA-5 |             | Normal   | InputForm for output readable as input                                   | Anna Maria Bigatti | 04 Apr 2014 16:43 | CoCoA-5 function: new        | 10     |
| 1623 | CoCoA-5 |             | Low      | EmacsUI: annoying colours  | Anna Maria Bigatti | 19 Jan 2024 16:50 | EmacsUI                      | 90     |
| 985  | CoCoA-5 |             | Normal   | Microsoft (Windows 10, maybe other versions): more help for installation | Anna Maria Bigatti | 16 Feb 2022 20:26 | EmacsUI                      | 10     |
| 671  | CoCoA-5 |             | Low      | Emacs UI: swapped splitting  | Anna Maria Bigatti | 09 Mar 2015 13:49 | EmacsUI                      | 0      |
| 424  | CoCoA-5 |             | Low      | Emacs UI: Name of emacs init file  | Anna Maria Bigatti | 22 Jul 2014 11:21 | EmacsUI                      | 10     |
| 1762 | CoCoA-5 |             | Normal   | CoCoA web site "analytics"   | Anna Maria Bigatti | 21 Aug 2023 18:20 | enhancing/improving          | 10     |



| #    | Project | Parent task | Priority | Subject  | Assignee           | Updated           | Category             | % Done |
|------|---------|-------------|----------|--|--------------------|-------------------|----------------------|--------|
| 1731 | CoCoA-5 |             | Normal   | Verbosity level in CoCoA5  | Anna Maria Bigatti | 11 May 2023 07:34 | enhancing/improving  | 70     |
| 1681 | CoCoA-5 |             | Normal   | Should Starting be case-insensitive?   | Anna Maria Bigatti | 22 Dec 2023 11:27 | enhancing/improving  | 20     |
| 1556 | CoCoA-5 |             | Normal   | DivAlg slower than NR  | Anna Maria Bigatti | 08 Jan 2021 11:20 | enhancing/improving  | 10     |
| 1138 | CoCoA-5 |             | Normal   | Latex: matrix  | Anna Maria Bigatti | 11 Dec 2017 16:45 | enhancing/improving  | 0      |
| 1116 | CoCoA-5 |             | Normal   | Port RowMat, ColMat, MatByRows,... to CoCoA-5                                | Anna Maria Bigatti | 01 Oct 2019 14:40 | enhancing/improving  | 0      |
| 865  | CoCoA-5 |             | Normal   | Implicit: make easier to use with rational functions                         | Anna Maria Bigatti | 03 Feb 2022 19:20 | enhancing/improving  | 0      |
| 600  | CoCoA-5 |             | Normal   | efficient subalgebras  | Anna Maria Bigatti | 30 Jul 2014 17:29 | enhancing/improving  | 0      |
| 1805 | CoCoA-5 |             | Normal   | Add CoCoA-5 syntax: syz(<F,> list of ModuleElem)                             | Anna Maria Bigatti | 26 Mar 2024 12:16 | Incomplete function  | 0      |
| 106  | CoCoA-5 |             | Normal   | I:f (IDEAL and RINGELEM) -- operator colon                                   | Anna Maria Bigatti | 02 Sep 2014 11:12 | Incomplete function  | 10     |
| 1776 | CoCoA-5 |             | Normal   | CoCoA-5 releases on redmine  | Anna Maria Bigatti | 12 Jan 2024 11:53 | Manual/documentation | 70     |
| 1548 | CoCoA-5 |             | Normal   | Man page for UniversalGBasis   | Anna Maria Bigatti | 03 Feb 2022 20:18 | Manual/documentation | 0      |
| 1454 | CoCoA-5 |             | Normal   | Filenames in release CoCoAManual/html containing [obsolete]                  | Anna Maria Bigatti | 03 Feb 2022 20:17 | Manual/documentation | 0      |
| 557  | CoCoA-5 |             | Normal   | CoCoAManual: improve part on input/output                                    | Anna Maria Bigatti | 03 Feb 2022 20:15 | Manual/documentation | 0      |
| 322  | CoCoA-5 |             | High     | Installation instructions (on website)                                       | Anna Maria Bigatti | 13 Jun 2022 15:32 | Manual/documentation | 60     |
| 296  | CoCoA-5 |             | Normal   | Documentation for Parser/Interpreter   | Anna Maria Bigatti | 09 Apr 2014 17:22 | Manual/documentation | 10     |
| 177  | CoCoA-5 |             | Normal   | CoCoAManual: General part of the documentation is obsolete: update? discard? | Anna Maria Bigatti | 10 Mar 2023 17:02 | Manual/documentation | 70     |
| 946  | CoCoA-5 |             | Urgent   | Function "ideal" evaluates the argument twice                                | Anna Maria Bigatti | 23 Feb 2022 12:14 | Parser/Interpreter   | 80     |
| 290  | CoCoA-5 |             | Normal   | Which functions are defined in CoCoALibSupplement?                           | Anna Maria Bigatti | 29 Mar 2019 19:23 | Parser/Interpreter   | 20     |
| 287  | CoCoA-5 |             | Normal   | --fullCoCoALibError prints too much (Try/UponError)                          | Anna Maria Bigatti | 02 Sep 2016 13:54 | Parser/Interpreter   | 10     |

| #    | Project | Parent task | Priority | Subject   | Assignee           | Updated           | Category                     | % Done |
|------|---------|-------------|----------|---|--------------------|-------------------|------------------------------|--------|
| 31   | CoCoA-5 |             | Normal   | theValue makes copy                                   | Anna Maria Bigatti | 18 Feb 2022 16:42 | Parser/Interpreter           | 60     |
| 7    | CoCoA-5 |             | High     | Automatic mapping between (some) rings                | Anna Maria Bigatti | 10 Mar 2023 17:08 | Parser/Interpreter           | 80     |
| 1373 | CoCoA-5 |             | Normal   | GFan also for Microsoft?                              | Anna Maria Bigatti | 17 Oct 2022 13:59 | Portability                  | 10     |
| 629  | CoCoA-5 |             | Normal   | Windows-GUI: compilation with MinGW                   | Anna Maria Bigatti | 19 Mar 2024 22:21 | Portability                  | 20     |
| 579  | CoCoA-5 |             | Normal   | Prototype package for Linear Commutative Algebra      | Elisa Palezzato    | 15 May 2020 10:27 | CoCoA-5 function: new        | 10     |
| 1502 | CoCoA-5 |             | Normal   | SystemCommand in Microsoft version                    | John Abbott        | 03 Feb 2022 19:46 | bug                          | 50     |
| 1228 | CoCoA-5 |             | High     | SLUG: filling an array                                | John Abbott        | 03 Feb 2022 19:42 | bug                          | 30     |
| 454  | CoCoA-5 |             | Normal   | interpolate   | John Abbott        | 04 Apr 2014 16:24 | CoCoA-4 function to be added | 0      |
| 1626 | CoCoA-5 |             | Normal   | NewMat: should be obsolescent?                        | John Abbott        | 19 Jan 2024 18:11 | CoCoA-4 function: obsolete   | 90     |
| 504  | CoCoA-5 |             | Normal   | New operators: += -= *= /=                            | John Abbott        | 25 Oct 2019 11:55 | CoCoA-5 function: new        | 20     |
| 1795 | CoCoA-5 |             | Normal   | Makefile problem: needlessly relinks CoCoAInterpreter | John Abbott        | 18 Mar 2024 20:51 | enhancing/improving          | 90     |
| 1104 | CoCoA-5 |             | Normal   | Eigenvectors: inconsistent return type                | John Abbott        | 03 Feb 2022 19:20 | enhancing/improving          | 10     |
| 610  | CoCoA-5 |             | Low      | Variable lt: assign before or after printing          | John Abbott        | 05 May 2024 19:42 | enhancing/improving          | 70     |
| 712  | CoCoA-5 |             | Normal   | External Libs: missing dependencies in Makefiles      | John Abbott        | 01 Oct 2019 14:31 | External Libs                | 10     |
| 1093 | CoCoA-5 |             | Low      | GUI: bugs and slugs                                   | John Abbott        | 18 Aug 2022 15:36 | GUI                          | 10     |
| 96   | CoCoA-5 |             | Normal   | sort is too slow                                      | John Abbott        | 28 May 2021 20:40 | Incomplete function          | 0      |
| 1077 | CoCoA-5 |             | Normal   | Manual: remove old stuff about "devices"              | John Abbott        | 14 Mar 2023 22:02 | Manual/documentation         | 70     |
| 1713 | CoCoA-5 |             | Low      | Windows: Qt-Gui does not link correctly               | Nico Mexis         | 25 Feb 2024 20:42 | GUI                          | 50     |
| 1393 | CoCoA-5 |             | Normal   | GUI with Qt5  | Ulrich von der Ohe | 30 Nov 2022 22:07 | GUI                          | 90     |