

## CoCoA-5 - CoCoA-5 Closed Issues

| #               | Subject  | Target version | Assignee           | Updated           | Estimated time |
|-----------------|--|----------------|--------------------|-------------------|----------------|
| <b>bug (38)</b> |  |                |                    |                   |                |
| 1709            | Test tut-CoCoLA2   | CoCoA-5.4.2    | Anna Maria Bigatti | 19 Apr 2024 17:10 | 1.01           |
| 1745            | Printing of Hilbert series via indent                          | CoCoA-5.4.2    | John Abbott        | 22 Dec 2023 20:10 | 1.67           |
| 1734            | Fix call to HilbertPoly in test/TutHokkaido5                   | CoCoA-5.4.2    | Anna Maria Bigatti | 12 Apr 2023 14:44 | 1.0            |
| 1171            | RealRoots: first point is sometimes wrong?                     | CoCoA-5.4.2    | John Abbott        | 14 Mar 2023 22:01 | 6.25           |
| 1714            | IsDivisible error (in QuotRing)                                | CoCoA-5.4.2    | John Abbott        | 14 Dec 2022 16:44 | 1.99           |
| 1717            | CRASH: equality test to a FUNCTION                             | CoCoA-5.4.2    | John Abbott        | 14 Dec 2022 16:23 | 1.11           |
| 1407            | Tagged values (Hilbert Series)                                 | CoCoA-5.4.0    | Anna Maria Bigatti | 18 Feb 2022 16:22 | 1.51           |
| 1651            | SEGV subsets ??  | CoCoA-5.4.0    | John Abbott        | 03 Feb 2022 19:03 | 0.99           |
| 1640            | MinSubsetOfGens does not find min subset                       | CoCoA-5.4.2    | Anna Maria Bigatti | 21 Jan 2022 10:10 | 1.66           |
| 1397            | Crashes if CoCoAHelp.xml is missing                            | CoCoA-5.4.0    | Anna Maria Bigatti | 12 Nov 2021 10:23 |                |
| 1610            | IsInRadical: some more little bugs                             | CoCoA-5.4.0    | Anna Maria Bigatti | 12 Nov 2021 09:48 |                |
| 1614            | SourceRegion gives misleading error mesg                       | CoCoA-5.4.0    | John Abbott        | 10 Nov 2021 18:04 | 1.66           |
| 1215            | RationalSolve: gives "Error: must be non-zero"                 | CoCoA-5.4.0    | John Abbott        | 24 Sep 2021 22:35 | 0.49           |
| 1531            | CRASH: arithmetic with HilbertSeries (tagged object)           | CoCoA-5.4.0    | John Abbott        | 24 Sep 2021 22:16 | 0.99           |
| 1216            | RationalSolve: gives wrong answer                              | CoCoA-5.4.0    | John Abbott        | 24 Sep 2021 21:50 | 5.55           |
| 1595            | Bad input causes crash   | CoCoA-5.4.0    | John Abbott        | 21 Jun 2021 15:44 | 2.5            |
| 1567            | Radical in non-zero char                                       | CoCoA-5.4.0    | John Abbott        | 19 Mar 2021 12:52 | 0.95           |
| 1577            | radical: lex order, ERROR: Ring is not standard graded         | CoCoA-5.4.0    | Anna Maria Bigatti | 19 Mar 2021 12:39 |                |
| 1509            | RingElems with empty input                                     | CoCoA-5.4.0    | Anna Maria Bigatti | 08 Jan 2021 11:35 | 3.01           |
| 1438            | ABORT for unterminated string literal                          | CoCoA-5.3.0    | John Abbott        | 09 Mar 2020 15:28 | 1.66           |
| 1420            | IdealOfProjectivePoints and MinGens: problem with CoCoA_ASSERT | CoCoA-5.3.0    | Anna Maria Bigatti | 26 Feb 2020 16:59 | 1.5            |
| 1421            | SEGV: error("")  | CoCoA-5.3.0    | John Abbott        | 26 Feb 2020 16:27 | 0.99           |
| 1424            | 'UNCAUGHT UNKNOWN EXCEPTION' when aborting 'isin' computation  | CoCoA-5.3.0    | John Abbott        | 26 Feb 2020 16:24 | 2.9            |
| 1286            | Website: trouble with the world map                            | CoCoA-5.3.0    | Anna Maria Bigatti | 14 Feb 2020 17:10 | 1.44           |
| 1288            | len for RINGELEM ??  | CoCoA-5.3.0    | John Abbott        | 13 Feb 2020 16:07 | 1.01           |
| 1383            | NewPolyRing on MS Windows                                      | CoCoA-5.3.0    | John Abbott        | 13 Feb 2020 09:30 | 0.99           |
| 1273            | NewPolyRing and SymbolRange together make a crash              | CoCoA-5.3.0    | John Abbott        | 13 Feb 2020 09:26 | 1.99           |
| 1382            | SEGV: should have been harmless                                | CoCoA-5.3.0    | John Abbott        | 09 Jan 2020 11:21 | 1.01           |
| 1274            | SortBy and SortedBy sometimes give wrong result                | CoCoA-5.3.0    | John Abbott        | 11 Oct 2019 22:02 | 1.55           |
| 1261            | ASCII function   | CoCoA-5.3.0    | John Abbott        | 10 Oct 2019 19:30 | 0.55           |

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|----------------------|---|-------------------------|--------------------|-------------------|----------------|
| 1321                 | RealRoots fails on $-x^2$   | CoCoA-5.3.0             | John Abbott        | 01 Oct 2019 14:11 | 0.67           |
| 1322                 | SEGV when debugging is active   | CoCoA-5.3.0             | John Abbott        | 27 Sep 2019 17:14 | 1.11           |
| 1239                 | CartesianProductList: case of just 1 entry in list                        | CoCoA-5.3.0             | Anna Maria Bigatti | 04 Mar 2019 12:30 | 0.99           |
| 1172                 | MinSubsetOfGens: problem with generators = 0                              | CoCoA-5.2.4             | Anna Maria Bigatti | 30 Jul 2018 14:23 |                |
| 1189                 | HilbertBasisKer: unhelpful error with some inputs                         | CoCoA-5.2.4             | Anna Maria Bigatti | 30 Jul 2018 14:17 | 2.51           |
| 1190                 | HilbertBasisKer: SEGV (again)   | CoCoA-5.2.4             | Anna Maria Bigatti | 30 Jul 2018 14:15 | 3.51           |
| 1191                 | ApproxSolve: $\log(0)$ on some examples                                   | CoCoA-5.2.4             | John Abbott        | 26 Jul 2018 13:59 | 0.77           |
| 1140                 | ImplicitModular: too many bad primes                                      | CoCoA-5.2.2             | Anna Maria Bigatti | 16 Jan 2018 15:45 | 1.01           |
| <b>Cleaning (28)</b> |   |                         |                    |                   |                |
| 1696                 | Which BOOST libs are actually needed?                                     | CoCoA-5.4.2             | John Abbott        | 09 Mar 2023 22:41 | 2.49           |
| 1697                 | Specifying BOOST in configure   | CoCoA-5.4.2             | John Abbott        | 14 Dec 2022 22:33 | 4.49           |
| 1398                 | Website: hide/delete all the CoCoA-4 stuff?                               | CoCoA-5.4.0             | Anna Maria Bigatti | 12 Nov 2021 11:14 | 0.44           |
| 1506                 | Remove XMLFileName from Main.C  | CoCoA-5.4.0             | John Abbott        | 16 Sep 2021 12:36 |                |
| 250                  | CoCoALib BuildInfo vs CoCoA-5 VersionInfo                                 | CoCoA-5.4.0             | Anna Maria Bigatti | 14 May 2021 17:48 | 0.25           |
| 1396                 | Website: download page for CoCoA-4 burns CPU                              | CoCoA-5.4.0             | Anna Maria Bigatti | 04 Mar 2021 17:15 |                |
| 1520                 | Replace BOOST_FOREACH by new C++14 range for syntax                       | CoCoA-5.4.0             | John Abbott        | 29 Jan 2021 12:05 | 1.44           |
| 1442                 | CoCoAInterpreter: executable size   | CoCoA-5.3.0             | John Abbott        | 12 Mar 2020 22:17 | 1.23           |
| 1224                 | Lexer: unclosed multi-line comment  | CoCoA-5.3.0             | John Abbott        | 04 Mar 2020 14:41 | 0.75           |
| 1318                 | Clean CoCoA-5/tests directory   | CoCoA-5.3.0             | Anna Maria Bigatti | 26 Feb 2020 16:31 | 1.49           |
| 1344                 | Clean out OBSOLESCENT   | CoCoA-5.3.0             | Anna Maria Bigatti | 14 Feb 2020 09:08 |                |
| 1385                 | valgrind: reports 456byte leak  | CoCoA-5.3.0             | John Abbott        | 13 Feb 2020 16:09 | 0.66           |
| 1220                 | NewRingFp obsolescent; superseded by NewZZmod                             | CoCoA-5.3.0             | John Abbott        | 01 Oct 2019 14:41 | 1.0            |
| 1217                 | CoCoA-5 tests directory: cleaning   | CoCoA-5.3.0             |                    | 01 Oct 2019 14:19 |                |
| 1127                 | subalgebra package obsolete?  | CoCoA-5.2.2             | Anna Maria Bigatti | 16 Jan 2018 15:59 | 2.01           |
| 1128                 | HomomorphismFns.cpkg5 no longer needed?                                   | CoCoA-5.2.2             | Anna Maria Bigatti | 16 Jan 2018 15:28 | 0.33           |
| 1092                 | Design issues for discussion in July 2017                                 | CoCoA-5.2.2             |                    | 11 Dec 2017 19:21 |                |
| 490                  | Duplicate fns: valuation and FactorMultiplicity                           | CoCoA-5.1.2 summer 2015 | John Abbott        | 30 Jul 2015 17:15 | 3.9            |
| 518                  | incr/decr functions: to be used in packages                               | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 15 Sep 2014 18:27 | 1.5            |
| 546                  | ideal wants LIST of RINGELEM  | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 02 Sep 2014 11:08 | 0.9            |
| 525                  | BuiltInFunctions: evalArgAsT1OrT2, evalArgAsT1OrT2OrT3, ... last argument | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 27 Aug 2014 18:09 | 2.5            |
| 493                  | Cleanup Hilbert package hp.cpkg5  | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 31 Jul 2014 15:06 | 2.0            |
| 475                  | Eliminate package approx  | CoCoA-5.1.0 Easter14    | John Abbott        | 07 May 2014 17:32 | 5.0            |

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| 18                                       | Printing matrices: I/O unified style for CoCoA-5?                     | CoCoA-5.1.0 Easter14    | John Abbott        | 07 May 2014 14:10 | 7.5            |
| 534                                      | Remove float.cpkg5  | CoCoA-5.1.0 Easter14    | John Abbott        | 24 Apr 2014 19:09 | 5.0            |
| 472                                      | Record keyword  | CoCoA-5.1.0 Easter14    | John Abbott        | 14 Apr 2014 09:16 | 1.0            |
| 444                                      | Not keyword/operator  | CoCoA-5.0.9             | John Abbott        | 02 Apr 2014 18:35 | 3.5            |
| 271                                      | test lecture-HF4  | CoCoA-5.0.3             | Anna Maria Bigatti | 24 Oct 2012 14:51 |                |
| <b>CoCoA-4 function to be added (32)</b> |   |                         |                    |                   |                |
| 606                                      | Evaluate in ring operator (was called :: in CoCoA-4)                  | CoCoA-5.4.0             | Anna Maria Bigatti | 16 Feb 2022 20:02 | 1.0            |
| 1536                                     | Implement xel?  | CoCoA-5.4.0             | John Abbott        | 24 Sep 2021 22:37 | 1.49           |
| 1236                                     | Add "socket" devices  | CoCoA-5.3.0             | John Abbott        | 19 Feb 2020 11:43 | 9.9            |
| 1401                                     | Parolacce e basi border   | CoCoA-5.3.0             | John Abbott        | 13 Feb 2020 17:22 |                |
| 1231                                     | system command  | CoCoA-5.3.0             | John Abbott        | 27 Sep 2019 17:25 |                |
| 1011                                     | Random seed fn  | CoCoA-5.2.2             | John Abbott        | 15 Nov 2017 17:43 |                |
| 1067                                     | "Randomize" and "Randomized" obsolete?                                | CoCoA-5.2.2             | John Abbott        | 15 Nov 2017 17:02 | 1.55           |
| 110                                      | Surprise return type for GCD of a list of ints                        | CoCoA-5.0.3             | John Abbott        | 09 Nov 2015 15:32 | 15.0           |
| 332                                      | Approx pts preprocessing fns  | CoCoA-5.1.2 summer 2015 | John Abbott        | 29 Jul 2015 21:41 | 2.77           |
| 732                                      | Primary Decomposition in CoCoA-5: port Luis Garcia's package(cocoa-4) | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 30 Jun 2015 15:20 | 5.0            |
| 359                                      | RingOf for list   | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 30 Jun 2015 15:10 | 2.0            |
| 485                                      | Initialization for CoCoA-5: file init.cocoa5                          | CoCoA-5.1.2 summer 2015 | John Abbott        | 30 Jun 2015 11:34 | 5.0            |
| 590                                      | package for subalgebras   | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 26 Jun 2015 16:58 | 2.01           |
| 365                                      | add function to compute minimal generators (like Minimalize)          | CoCoA-5.0.9             | Anna Maria Bigatti | 15 May 2015 11:19 | 4.2505         |
| 200                                      | add modules and module operations                                     | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 15 May 2015 09:02 | 27.0           |
| 588                                      | Resume code for "gin" (generic initial ideal)                         | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 15 Sep 2014 18:28 | 2.0            |
| 484                                      | Evaluate in other ring (was called :: in CoCoA-4)                     | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 11 Sep 2014 17:43 | 1.51           |
| 615                                      | Resume MayerVietorisTreeN1  | CoCoA-5.1.1 Seoul14     | Winfried Bruns     | 05 Sep 2014 11:28 |                |
| 603                                      | Resume CheckArgTypes  | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 05 Sep 2014 11:28 | 1.0            |
| 132                                      | BringIn should allow reduction modulo p                               | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 04 Sep 2014 12:05 | 2.0            |
| 330                                      | Syzygy for modules: homogeneous module                                | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 28 Jul 2014 16:35 | 2.0            |
| 596                                      | function "packages"   | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 24 Jul 2014 09:56 | 1.5            |
| 529                                      | Naive version of resolution and Betti numbers                         | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 09 May 2014 12:56 | 5.0            |
| 32                                       | Elim(t, I)  | CoCoA-5.0.9             | Anna Maria Bigatti | 02 Apr 2014 17:18 | 1.0            |
| 371                                      | Resurrect LinearSimplify  | CoCoA-5.0.9             | John Abbott        | 07 Mar 2014 15:25 |                |
| 212                                      | NBM: add to CoCoA-5   | CoCoA-5.0.3             | Anna Maria Bigatti | 24 Feb 2014 18:07 |                |

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| 237                                   | port homog/homogenized for ideal to cocoa-5                          | CoCoA-5.0.9          | Anna Maria Bigatti | 01 Aug 2013 07:23 |                |
| 93                                    | Hilbert series: global output rings for non-standard gradings        | CoCoA-5.0.9          | Anna Maria Bigatti | 23 Jul 2013 18:13 | 5.0            |
| 19                                    | How to get the version number of CoCoA-5?                            | CoCoA-5.0.3          | Anna Maria Bigatti | 14 Nov 2012 11:34 |                |
| 80                                    | "<=" for ideals  | CoCoA-5.0.2          | Anna Maria Bigatti | 23 Jan 2012 14:31 | 1.0            |
| 77                                    | Porting package "primary.cpkg" to cocoa-5                            | CoCoA-5.0.2          | Anna Maria Bigatti | 19 Jan 2012 11:38 | 12.0           |
| 12                                    | Add "syntax" to online manual  | CoCoA-5.0.2          | Anna Maria Bigatti | 09 Nov 2011 11:32 | 3.5            |
| <b>CoCoA-4 function: obsolete (5)</b> |  |                      |                    |                   |                |
| 1123                                  | Should "minimalize" be obsolescent?                                  | CoCoA-5.2.2          | Anna Maria Bigatti | 11 Dec 2017 18:01 | 5.01           |
| 336                                   | Mat(Module) should give error  | CoCoA-5.0.3          | Anna Maria Bigatti | 06 Jul 2015 07:43 | 1.0            |
| 25                                    | Function "Call"  | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 05 Sep 2014 11:31 | 2.5            |
| 99                                    | Function "insert": obsolescent                                       | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 27 Aug 2014 18:17 | 2.0            |
| 532                                   | New package: OBSOLESCENT   | CoCoA-5.1.0 Easter14 | John Abbott        | 02 Jul 2014 16:54 |                |
| <b>CoCoA-5 function: new (58)</b>     |  |                      |                    |                   |                |
| 1112                                  | New function: IsEmpty  | CoCoA-5.4.2          | Anna Maria Bigatti | 22 Dec 2023 19:21 | 2.0            |
| 1724                                  | New function: AdjacentMinors   | CoCoA-5.4.2          | Anna Maria Bigatti | 14 Mar 2023 11:53 |                |
| 1272                                  | Groebner Bases over ZZ   | CoCoA-5.4.0          | John Abbott        | 17 Feb 2022 21:22 | 14.99          |
| 1431                                  | Juxtaposition of string literals                                     | CoCoA-5.4.0          | John Abbott        | 14 Sep 2021 11:45 | 1.99           |
| 1546                                  | Improve 'describe' or 'print' for a function                         | CoCoA-5.4.0          | Anna Maria Bigatti | 04 Mar 2021 17:27 | 2.89           |
| 1174                                  | package of a function --> of an identifier!                          | CoCoA-5.4.0          | Anna Maria Bigatti | 29 Jan 2021 15:43 |                |
| 1516                                  | substring function   | CoCoA-5.4.0          | John Abbott        | 29 Jan 2021 12:03 | 0.99           |
| 1439                                  | New function: LinearForm   | CoCoA-5.3.0          | Anna Maria Bigatti | 20 Mar 2020 12:55 | 5.2            |
| 1243                                  | New function: Read a string into a list (of RingElem) -- CoCoA-5     | CoCoA-5.3.0          | Anna Maria Bigatti | 28 Feb 2020 17:52 | 5.0            |
| 1289                                  | assert-function for cocoa5   | CoCoA-5.3.0          | John Abbott        | 26 Feb 2020 16:32 | 1.23           |
| 1316                                  | Matrix row reduction (rref)  | CoCoA-5.3.0          | John Abbott        | 19 Feb 2020 11:31 | 2.88           |
| 1374                                  | Add function power to CoCoA-5  | CoCoA-5.3.0          | Anna Maria Bigatti | 13 Feb 2020 16:30 | 1.33           |
| 1247                                  | sleep function   | CoCoA-5.3.0          | John Abbott        | 04 Mar 2019 18:00 | 1.99           |
| 1202                                  | New package: arrangements  | CoCoA-5.2.4          | Elisa Palezzato    | 06 Aug 2018 16:20 |                |
| 1201                                  | New package: poset   | CoCoA-5.2.4          | Elisa Palezzato    | 06 Aug 2018 16:20 |                |
| 978                                   | CommonDenom: for polys and lists?                                    | CoCoA-5.2.4          | John Abbott        | 30 Jul 2018 14:28 | 1.01           |
| 1122                                  | New fn: RandomLinearForm   | CoCoA-5.2.4          | Anna Maria Bigatti | 30 Jul 2018 14:22 | 0.99           |
| 1142                                  | NewZZmod: port to CoCoA-5  | CoCoA-5.2.2          | Anna Maria Bigatti | 16 Jan 2018 15:30 | 2.01           |
| 1091                                  | ExternalLib-MathSAT: (first) prototype CoCoA-5 interface for MathSAT | CoCoA-5.2.2          | Anna Maria Bigatti | 11 Dec 2017 17:58 | 8.01           |

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| 1084 | New function: PrevPrime   | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:43 | 1.51           |
| 996  | New function: IdealOfGBasis   | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 29 Apr 2017 08:34 | 2.01           |
| 1043 | New function: IsCoprime   | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 28 Apr 2017 19:21 | 1.0            |
| 903  | New function CallOnGroebnerFanIdeals: call function on GFan ideals            | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 26 Apr 2017 19:04 | 4.0            |
| 1044 | New function: SectionalMatrix, PrintSectionalMatrix                           | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 10 Apr 2017 17:55 | 2.01           |
| 1017 | New function: SetGBasisAsGens [--> NO: use IdealOfGBasis]                     | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 10 Apr 2017 17:43 | 0.51           |
| 965  | New function: multigraded BettiNumbers  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 10 Apr 2017 17:39 | 4.01           |
| 845  | Primary Decomposition in CoCoA-5.1.6: zero dimensional, finite characteristic | CoCoA-5.2.0 spring 2017 | Elisa Palezzato    | 10 Apr 2017 16:47 | 20.1           |
| 734  | Primary Decomposition in CoCoA-5: zero dimensional, zero characteristic       | CoCoA-5.2.0 spring 2017 | Elisa Palezzato    | 07 Apr 2017 10:13 | 40.01          |
| 927  | Add "exit" in addition to "ciao"  | CoCoA-5.2.0 spring 2017 | John Abbott        | 01 Mar 2017 14:15 | 1.56           |
| 954  | New function: StdBasis (standard basis)                                       | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 01 Mar 2017 14:11 | 6.01           |
| 959  | New function: SymmetricPolys  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 01 Mar 2017 14:10 | 2.0            |
| 700  | Which external libs are present?  | CoCoA-5.1.3/4 Jan 2016  | Anna Maria Bigatti | 18 Feb 2016 15:52 | 1.0            |
| 771  | New fns: MaxBy and MinBy to find minimum/maximum of a list wrt a given order  | CoCoA-5.1.3/4 Jan 2016  | John Abbott        | 17 Feb 2016 12:40 |                |
| 761  | Evaluating a QuasiPol   | CoCoA-5.1.3/4 Jan 2016  | John Abbott        | 17 Feb 2016 11:26 | 2.0            |
| 760  | Primary Decomposition in CoCoA-5.1.3: zero dimensional, finite characteristic | CoCoA-5.1.3/4 Jan 2016  | Elisa Palezzato    | 17 Feb 2016 10:55 |                |
| 844  | IsMaximal, IsPrimary for IDEAL (in cocoa language)                            | CoCoA-5.1.3/4 Jan 2016  | Anna Maria Bigatti | 16 Feb 2016 17:43 | 2.0            |
| 733  | Primary Decomposition in CoCoA-5.1.2: zero dimensional, finite characteristic | CoCoA-5.1.2 summer 2015 | Elisa Palezzato    | 06 Aug 2015 10:59 | 15.0           |
| 622  | New function: RandomSubset  | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 30 Jun 2015 14:19 | 6.01           |
| 204  | NmzComputation: the powerful NormalizComputation function in CoCoA-5          | CoCoA-5.1.1 Seoul14     | Christof Soeger    | 11 Sep 2014 17:39 |                |
| 553  | Port function MantissaAndExponent2  | CoCoA-5.1.1 Seoul14     | John Abbott        | 03 Sep 2014 12:36 | 4.0            |
| 173  | Anonymous symbols: should they be available in CoCoA-5?                       | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 02 Sep 2014 11:20 | 6.0            |
| 273  | Package for Polynomial Algebra Homomorphisms                                  | CoCoA-5.1.1 Seoul14     | Giulia Bianco      | 29 Jul 2014 09:31 | 50.0           |
| 20   | How to get the compilation flags of CoCoA-5?                                  | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 28 Jul 2014 17:44 |                |
| 414  | New fn to increase max recursion depth  | CoCoA-5.1.0 Easter14    | John Abbott        | 02 May 2014 17:05 | 8.0            |
| 502  | New fn/object type: timer   | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 02 May 2014 16:49 | 3.0            |
| 301  | How to obtain an integer from a finite field element? AsINT?                  | CoCoA-5.1.0 Easter14    | John Abbott        | 24 Apr 2014 20:16 | 2.0            |
| 362  | New function: IsZeroDivisor   | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 14 Apr 2014 09:14 | 2.0            |
| 328  | Swap  | CoCoA-5.0.9             | John Abbott        | 25 Mar 2014 15:11 |                |
| 372  | add IsFactorClosed  | CoCoA-5.0.9             | John Abbott        | 21 Mar 2014 11:35 |                |
| 380  | Add Froby functions to cocoa-5  | CoCoA-5.0.9             | Anna Maria Bigatti | 24 Feb 2014 18:15 |                |
| 347  | C5 cannot compute derivative of a ratfn                                       | CoCoA-5.0.3             | John Abbott        | 19 Feb 2014 21:34 |                |
| 309  | (Multi)BlockMatrix  | CoCoA-5.0.3             | Anna Maria Bigatti | 31 May 2013 14:41 |                |

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| 8                   | source region  | CoCoA-5.0.3             | John Abbott        | 21 May 2013 17:12 |                |
| 331                 | Is it possible to have R^3 for NewFreeModule(R,3)?   | CoCoA-5.0.9             | Anna Maria Bigatti | 15 Mar 2013 17:01 |                |
| 90                  | Make the new fn CoefficientsWRT available in C5  | CoCoA-5.0.9             | Anna Maria Bigatti | 28 Nov 2012 11:31 | 7.6            |
| 131                 | Conversion from bool to INT  | CoCoA-5.0.3             | John Abbott        | 04 Jul 2012 09:59 |                |
| 184                 | MAT/INT ? MAT/RINGELEM ?   | CoCoA-5.0.3             | John Abbott        | 04 Jul 2012 09:58 |                |
| 158                 | May AsRAT produce an INT?  | CoCoA-5.0.3             | John Abbott        | 08 Jun 2012 17:26 | 2.75           |
| <b>EmacsUI (43)</b> |  |                         |                    |                   |                |
| 1766                | Emacs 29: Removal of obsolete entries  | CoCoA-5.4.2             | John Abbott        | 22 Dec 2023 11:35 |                |
| 1526                | EmacsUI: help/manual for selected string -- or just for word with cursor on?                               | CoCoA-5.4.0             | John Abbott        | 07 Mar 2022 15:32 | 2.51           |
| 1412                | Emacs UI: font size  | CoCoA-5.4.0             | John Abbott        | 10 Nov 2021 18:17 | 3.55           |
| 1537                | EmacsUI: strange colours, sometimes  | CoCoA-5.4.0             | John Abbott        | 24 Sep 2021 22:32 | 1.79           |
| 1507                | wordlist without OBSOLETE entries?   | CoCoA-5.4.0             | John Abbott        | 14 May 2021 17:49 | 0.88           |
| 1554                | cocoa5-emacs-dir or cocoa5-root-dir?   | CoCoA-5.4.0             | John Abbott        | 04 Mar 2021 17:10 | 1.23           |
| 1505                | EmacsUI: fix "Go to Error C-c C-p"   | CoCoA-5.4.0             | Anna Maria Bigatti | 14 Oct 2020 14:06 | 1.0            |
| 1448                | EmacsUI: sending line with "7" calls SourceRegion (!?!?)   | CoCoA-5.3.2             | John Abbott        | 30 Apr 2020 14:16 | 2.01           |
| 945                 | Emacs UI: comint buffer silently truncates(?) long lines when sending                                      | CoCoA-5.3.0             | John Abbott        | 04 Mar 2020 19:01 | 0.7            |
| 781                 | Option to "fold" long lines?   | CoCoA-5.3.0             | John Abbott        | 04 Mar 2020 15:41 | 0.66           |
| 672                 | Emacs UI: strange string literal causes crash  | CoCoA-5.3.0             | John Abbott        | 04 Mar 2020 15:31 | 4.8            |
| 1364                | Emacs UI: start cocoa5 with system command enabled   | CoCoA-5.3.0             | John Abbott        | 13 Feb 2020 16:37 | 1.66           |
| 1358                | Emacs UI: should active input line be cleared before sending line from CoCoA-5 file?                       | CoCoA-5.3.0             | John Abbott        | 13 Feb 2020 14:03 | 1.88           |
| 1325                | Emacs UI: emacs does not recognize "until" as marking the end of a "repeat" block                          | CoCoA-5.3.0             | John Abbott        | 26 Oct 2019 09:53 | 1.51           |
| 1109                | Emacs UI can be slow in M\$ Windows  | CoCoA-5.2.2             | John Abbott        | 15 Nov 2017 17:05 | 0.66           |
| 1087                | EmacsUI: get error "wrong-type-argument processp nil" when doing M-x cocoa5 when executable does not exist | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:06 |                |
| 748                 | Emacs UI: return inside a block of output sends several lines (not just the one I'm on)                    | CoCoA-5.2.0 spring 2017 | John Abbott        | 28 Apr 2017 09:12 | 3.01           |
| 1002                | Emacs UI: cocoa5-send-line skips too many chars  | CoCoA-5.2.0 spring 2017 | John Abbott        | 27 Apr 2017 11:31 | 2.6            |
| 1038                | Emacs: sent interrupt to CoCoA   | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 26 Apr 2017 17:20 | 4.01           |
| 998                 | Emacs UI: sending empty input from cocoa5 buffer   | CoCoA-5.2.0 spring 2017 | John Abbott        | 26 Apr 2017 17:19 | 3.1            |
| 698                 | Emacs UI: problems with packages on windows  | CoCoA-5.1.3/4 Jan 2016  | Anna Maria Bigatti | 16 Feb 2016 17:50 | 2.0            |
| 164                 | CoCoA-5 emacs interface bug (minor): Source & SourceRegion with troublesome filenames                      | CoCoA-5.1.2 summer 2015 | John Abbott        | 29 Jul 2015 21:37 | 1.0            |
| 699                 | Emacs UI: set back "cocoa5-executable" to "CoCoAInterpreter"?  | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 18 May 2015 17:10 | 2.0            |
| 684                 | Emacs UI: wrong name after auto-inserting enddefine  | CoCoA-5.1.2 summer 2015 | John Abbott        | 20 Apr 2015 11:17 | 2.5            |
| 608                 | Emacs UI: C-return for send-line and send-region   | CoCoA-5.1.1 Seoul14     | John Abbott        | 03 Sep 2014 13:43 |                |

| #                               | Subject  | Target version       | Assignee           | Updated           | Estimated time |
|---------------------------------|--|----------------------|--------------------|-------------------|----------------|
| 464                             | Emacs UI: split horizontally instead of vertically?  | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 03 Sep 2014 13:40 | 10.0           |
| 561                             | Emacs UI: unrecognized keywords (ImportByValue...)   | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 02 Sep 2014 11:21 | 2.0            |
| 433                             | EMACS UI: trouble with sending a long line   | CoCoA-5.1.1 Seoul14  | John Abbott        | 02 Sep 2014 11:10 | 4.4            |
| 607                             | Emacs UI; remove send-buffer?  | CoCoA-5.1.1 Seoul14  | John Abbott        | 02 Sep 2014 11:02 | 0.5            |
| 567                             | Emacs UI: coloured syntax in output buffer has problems if error message shows a single double-quote | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 02 Jul 2014 16:11 | 1.0            |
| 397                             | EMACS UI: fix windows splitting  | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 02 Jul 2014 16:03 |                |
| 460                             | Emacs UI: updating abbrev-table  | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 14 May 2014 16:30 |                |
| 494                             | Emacs UI: installation on Mac OS 10.8.5  | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 09 May 2014 13:20 |                |
| 523                             | EmacsUI: lower case keywords   | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 07 May 2014 14:05 | 3.0            |
| 381                             | Emacs User Interface: Easier binding for sending a line to cocoa-5                                   | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 07 May 2014 13:57 | 8.0            |
| 441                             | Emacs UI: C-c C-e does not ignore keywords inside strings  | CoCoA-5.1.0 Easter14 | John Abbott        | 02 May 2014 17:21 | 5.0            |
| 462                             | Emacs UI: semicolon problems   | CoCoA-5.1.0 Easter14 | John Abbott        | 02 May 2014 17:18 | 1.0            |
| 470                             | Emacs UI: cocoa5-close-block should beep when there is no block to close                             | CoCoA-5.1.0 Easter14 | John Abbott        | 15 Apr 2014 15:21 | 3.0            |
| 445                             | EmacsUI: indentation is wrong sometimes (e.g. if Lambda1 is on previous line)                        | CoCoA-5.0.9          | John Abbott        | 02 Apr 2014 18:35 | 1.5            |
| 423                             | Emacs UI: semicolon does not work in emacs-24.3  | CoCoA-5.0.9          | Anna Maria Bigatti | 02 Apr 2014 18:34 | 1.0            |
| 280                             | EmacsUI: indentation is wrong with parentheses   | CoCoA-5.0.3          | John Abbott        | 21 May 2013 17:34 |                |
| 128                             | wordlist.txt generation  | CoCoA-5.0.3          | Anna Maria Bigatti | 07 Jun 2012 18:31 | 3.0            |
| 172                             | add customization for --fullCoCoALibError in EmacsUI   | CoCoA-5.0.3          | Anna Maria Bigatti | 01 Jun 2012 17:36 | 1.0            |
| <b>enhancing/improving (78)</b> |  |                      |                    |                   |                |
| 1072                            | syz: apply to ModuleElem?  | CoCoA-5.4.2          | Anna Maria Bigatti | 26 Mar 2024 17:12 | 1.01           |
| 823                             | NewPolyRing with weights -- better interface?  | CoCoA-5.4.2          | Anna Maria Bigatti | 18 Mar 2024 21:39 | 2.01           |
| 948                             | radical is slow (compared to singular) on these examples   | CoCoA-5.4.2          | Anna Maria Bigatti | 22 Dec 2023 20:12 | 16.0           |
| 1629                            | RingElem slow with many indets   | CoCoA-5.4.2          | Anna Maria Bigatti | 22 Dec 2023 20:06 | 6.33           |
| 1075                            | LaTeX package: power-product printing  | CoCoA-5.4.2          | Anna Maria Bigatti | 22 Dec 2023 19:30 | 3.65           |
| 1698                            | indent: return a string?   | CoCoA-5.4.2          | Anna Maria Bigatti | 15 Mar 2023 07:30 | 2.66           |
| 1477                            | Packages: questions from Andraschko  | CoCoA-5.4.2          | John Abbott        | 14 Mar 2023 21:57 | 2.33           |
| 635                             | Automatic mapping of RingElem (in operation with a compound value)                                   | CoCoA-5.4.2          | John Abbott        | 14 Mar 2023 14:59 |                |
| 1029                            | Readline: does not recognize interrupts  | CoCoA-5.4.0          | John Abbott        | 07 Mar 2022 16:58 | 2.02           |
| 1616                            | UnivariateIndetIndex: remove cocoa-5 implementation and use CoCoALib's                               | CoCoA-5.4.2          | Anna Maria Bigatti | 19 Nov 2021 15:32 | 0.77           |
| 1501                            | testing for syntax errors  | CoCoA-5.4.0          | John Abbott        | 05 Nov 2021 16:53 |                |
| 1615                            | apply: remove for RingHom  | CoCoA-5.4.0          | John Abbott        | 04 Oct 2021 11:57 | 0.22           |
| 1573                            | ApproxSolve: very imprecise  | CoCoA-5.4.2          | John Abbott        | 24 Sep 2021 22:26 | 3.99           |

| #    | Subject  | Target version | Assignee           | Updated           | Estimated time |
|------|--|----------------|--------------------|-------------------|----------------|
| 1392 | ApproxSolve: another slow example  | CoCoA-5.4.0    | Anna Maria Bigatti | 24 Sep 2021 22:21 | 1.55           |
| 1540 | Double power   | CoCoA-5.4.0    | John Abbott        | 24 Sep 2021 21:45 | 2.49           |
| 1270 | RationalSolve: use MinPolyQuot instead of elim                                   | CoCoA-5.4.0    | John Abbott        | 16 Sep 2021 12:40 | 0.99           |
| 1287 | Better err mesg for easy typo in ring definition                                 | CoCoA-5.4.0    | John Abbott        | 16 Sep 2021 12:38 |                |
| 1599 | ConcatStr  | CoCoA-5.4.0    | John Abbott        | 14 Sep 2021 11:53 | 1.11           |
| 1597 | GetRow/GetRows are extraordinarily slow  | CoCoA-5.4.0    | Anna Maria Bigatti | 14 Sep 2021 11:47 | 3.33           |
| 687  | Builtin fn makes unnecessary copy of arg   | CoCoA-5.4.0    | John Abbott        | 28 May 2021 15:43 | 0.75           |
| 1493 | Automatic ring mapping in assignment?  | CoCoA-5.4.0    | John Abbott        | 02 Apr 2021 08:54 |                |
| 1553 | Timing SystemCommand   | CoCoA-5.4.0    | John Abbott        | 19 Mar 2021 13:09 |                |
| 724  | RationalSolve: wrongly complains about non zero-dim even in finite char          | CoCoA-5.4.0    | John Abbott        | 19 Mar 2021 12:43 | 1.44           |
| 1512 | Package with unexpected EOF  | CoCoA-5.4.0    | John Abbott        | 08 Jan 2021 11:53 | 0.51           |
| 1495 | Package exporting nothing?   | CoCoA-5.4.0    | John Abbott        | 08 Jan 2021 11:51 | 3.51           |
| 1530 | VersionInfo -- better field names?   | CoCoA-5.4.0    | Anna Maria Bigatti | 08 Jan 2021 11:24 | 2.22           |
| 1527 | Inadequate error message on incorrect list access                                | CoCoA-5.4.0    | John Abbott        | 08 Jan 2021 11:19 | 2.33           |
| 1514 | Cocoa crashes when calling RingElems   | CoCoA-5.4.0    | John Abbott        | 03 Dec 2020 21:31 | 4.33           |
| 1461 | Automatic mapping for multiplication?  | CoCoA-5.4.0    | Anna Maria Bigatti | 27 Oct 2020 19:08 | 3.66           |
| 637  | Undesirable consequence of automatic mapping of RingElems?                       | CoCoA-5.4.0    | John Abbott        | 27 Oct 2020 18:15 | 1.81           |
| 636  | Distinguish indets from symbols in coeffering in Use command                     | CoCoA-5.4.0    | John Abbott        | 27 Oct 2020 17:59 | 0.66           |
| 674  | Ring constructor: allow empty range for indices?                                 | CoCoA-5.4.0    | John Abbott        | 14 Oct 2020 14:43 | 1.21           |
| 1489 | Unhelpful error message for package followed by identifier (without dollar sign) | CoCoA-5.4.0    | John Abbott        | 14 Oct 2020 13:58 | 1.99           |
| 1348 | cocoa5 script for releases   | CoCoA-5.3.2    | Anna Maria Bigatti | 09 Oct 2020 15:48 | 4.99           |
| 1399 | CoCoA-5 interpreter: idle/busy indicator   | CoCoA-5.3.0    | John Abbott        | 06 Mar 2020 12:24 | 7.3            |
| 1390 | CoCoA-5 test: radical too slow   | CoCoA-5.3.0    | John Abbott        | 04 Mar 2020 16:22 | 2.11           |
| 1290 | NewPolyRing: allow symbols with just head and no indices?                        | CoCoA-5.3.0    | John Abbott        | 15 Feb 2020 10:28 | 0.99           |
| 673  | Error message: I was expecting...  | CoCoA-5.3.0    | John Abbott        | 13 Feb 2020 16:39 | 1.88           |
| 1352 | cocoa5 (launch) script: sleep time   | CoCoA-5.3.0    | John Abbott        | 13 Feb 2020 15:40 | 1.66           |
| 1410 | IsDivisible also for INT   | CoCoA-5.3.0    | Anna Maria Bigatti | 13 Feb 2020 15:40 | 2.01           |
| 1327 | Inconvenient PolyRingHom, PolyAlgebraHom   | CoCoA-5.3.0    | Anna Maria Bigatti | 13 Feb 2020 09:35 |                |
| 1384 | NewPolyRing and SymbolRange  | CoCoA-5.3.0    | Anna Maria Bigatti | 13 Feb 2020 09:29 |                |
| 1284 | CartesianProductList: too slow   | CoCoA-5.3.0    | John Abbott        | 22 Oct 2019 11:10 | 1.99           |
| 1240 | John's visit Feb 2019  | CoCoA-5.3.0    | John Abbott        | 01 Oct 2019 14:25 | 0.44           |
| 1012 | Chebyshev polynomials  | CoCoA-5.3.0    | John Abbott        | 03 Apr 2019 17:08 | 0.44           |
| 907  | ApproxSolve very slow on this example  | CoCoA-5.2.4    | Anna Maria Bigatti | 06 Aug 2018 16:22 | 7.7            |



| #    | Subject  | Target version          | Assignee           | Updated           | Estimated time |
|------|--|-------------------------|--------------------|-------------------|----------------|
| 1114 | Some other examples for 0-dim radical  | CoCoA-5.2.4             | Anna Maria Bigatti | 31 Jul 2018 12:03 | 1.01           |
| 275  | Unhelpful error messages when SmallExponent_t is unsigned char.              | CoCoA-5.2.4             | John Abbott        | 17 Jan 2018 11:44 | 3.8            |
| 1032 | IsInRadical: fragile code  | CoCoA-5.2.2             | John Abbott        | 15 Dec 2017 15:37 | 1.11           |
| 798  | use poly ring with many variables is too slow                                | CoCoA-5.2.2             | John Abbott        | 13 Dec 2017 14:28 |                |
| 1139 | Radical problems   | CoCoA-5.2.2             | Anna Maria Bigatti | 13 Dec 2017 13:23 | 1.51           |
| 1137 | Latex: ideal   | CoCoA-5.2.2             | Anna Maria Bigatti | 12 Dec 2017 15:36 | 1.01           |
| 1100 | PrimaryDecomposition0: says not 0-dim but IsZeroDim says ideal is zero-dim!  | CoCoA-5.2.2             | Anna Maria Bigatti | 11 Dec 2017 17:53 | 1.01           |
| 940  | Check all fns in packages work even without BackwardCompatible.cpkg5         | CoCoA-5.2.2             | John Abbott        | 04 Dec 2017 11:16 |                |
| 1060 | describe ring: add final newline   | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:59 | 0.44           |
| 670  | Error column indicator misaligned with non-printing (unprintable) characters | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:58 | 1.8            |
| 1095 | TimeOut not working as hoped/expected  | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:04 | 1.11           |
| 751  | description of a RING  | CoCoA-5.1.3/4 Jan 2016  | Anna Maria Bigatti | 05 May 2017 16:07 | 6.01           |
| 708  | ExternalLib Normaliz: verbose flag?  | CoCoA-5.2.0 spring 2017 | John Abbott        | 05 May 2017 10:36 | 3.01           |
| 1047 | NewPolyRing with user defined ordering is slower than CoCoALib               | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 01 May 2017 10:43 | 5.31           |
| 1051 | ReadExpr(P, string) and RingElem(P, string)                                  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 28 Apr 2017 19:06 | 3.0            |
| 973  | GroebnerFanIdeals: verbosity and output style                                | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 28 Apr 2017 15:14 | 5.5            |
| 877  | Easier syntax to make a PRINCIPAL ideal?                                     | CoCoA-5.2.0 spring 2017 | John Abbott        | 27 Apr 2017 14:57 | 0.77           |
| 878  | RingElem applied to a symbol (repr as a string)                              | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 27 Apr 2017 14:34 | 1.8            |
| 909  | ReadExpr: decimal point  | CoCoA-5.2.0 spring 2017 | John Abbott        | 27 Apr 2017 11:43 | 2.0            |
| 1028 | Readline: cursor moves wrongly when at start of line with a prompt           | CoCoA-5.2.0 spring 2017 | John Abbott        | 27 Apr 2017 11:35 | 0.99           |
| 883  | gin: return/print a suitable change of variables                             | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 26 Apr 2017 17:25 | 2.01           |
| 870  | GBasis of product of ideals is wrong (Vadim Tropashko) --> l.myReset()       | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 26 Apr 2017 15:56 | 2.01           |
| 994  | SEGV: Toric example from Kazuki Maeda  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 07 Apr 2017 09:48 | 6.01           |
| 744  | Handle interrupts more helpfully   | CoCoA-5.2.0 spring 2017 | John Abbott        | 02 Mar 2017 16:15 | 2.0            |
| 995  | LaTeX(x <sup>10</sup> ) should use curly brackets                            | CoCoA-5.2.0 spring 2017 | John Abbott        | 01 Mar 2017 13:35 | 0.251          |
| 650  | CoCoA-5 test (SourceAnna); problem in HilbertPoly                            | CoCoA-5.1.3/4 Jan 2016  | Anna Maria Bigatti | 23 Mar 2016 10:18 |                |
| 768  | Rename LogToTerm to MakeTerm   | CoCoA-5.1.3/4 Jan 2016  | John Abbott        | 17 Feb 2016 13:05 | 0.9            |
| 767  | Rename Log to exponents  | CoCoA-5.1.3/4 Jan 2016  | John Abbott        | 17 Feb 2016 13:02 |                |
| 652  | Flag to enable/disable printing of list of loaded packages                   | CoCoA-5.1.2 summer 2015 | John Abbott        | 29 Jul 2015 16:24 | 6.01           |
| 719  | Readline: consider creating a textual interpreter with readline              | CoCoA-5.1.2 summer 2015 | John Abbott        | 28 Jul 2015 15:56 | 5.0            |
| 726  | TopLevel cannot "import" a package variable                                  | CoCoA-5.1.2 summer 2015 | John Abbott        | 27 Jul 2015 15:06 | 7.0            |
| 634  | Symbol in the coeff ring   | CoCoA-5.1.2 summer 2015 | John Abbott        | 22 Oct 2014 20:02 |                |

## External Libs (6)

| #                               | Subject   | Target version          | Assignee           | Updated           | Estimated time |
|---------------------------------|---|-------------------------|--------------------|-------------------|----------------|
| 713                             | External libs: interrupting not easy                                    | CoCoA-5.4.0             | John Abbott        | 24 Sep 2021 21:58 | 2.66           |
| 1226                            | ExternalLibs return empty list  | CoCoA-5.3.0             | Anna Maria Bigatti | 02 Oct 2019 16:22 |                |
| 711                             | External Libs: print credits?   | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 28 Apr 2017 14:49 | 4.4            |
| 757                             | readline: fix script for finding libreadline                            | CoCoA-5.2.0 spring 2017 | John Abbott        | 28 Apr 2017 09:13 | 4.01           |
| 243                             | Normaliz tests for CoCoA5   | CoCoA-5.2.0 spring 2017 | Christof Soeger    | 12 Oct 2016 15:01 | 3.05           |
| 745                             | Readline: avoid printing out READLINE twice                             | CoCoA-5.1.2 summer 2015 | John Abbott        | 29 Jul 2015 15:18 |                |
| <b>GUI (12)</b>                 |   |                         |                    |                   |                |
| 612                             | The C5 gui does not exit properly when using the exit menu entry        | CoCoA-5.?.?             | John Abbott        | 28 Feb 2024 21:20 | 0.61           |
| 750                             | C5 GUI: very slow when printing many short lines                        | CoCoA-5.4.2             | John Abbott        | 07 Oct 2022 11:06 | 1.23           |
| 240                             | GUI compilation: GMP is not naturally thread-safe                       | CoCoA-5.3.0             | John Abbott        | 11 Mar 2020 21:34 | 3.33           |
| 458                             | CoCoA5 GUI; failed build "wrong architecture"                           | CoCoA-5.3.0             | John Abbott        | 02 Mar 2020 15:40 | 0.95           |
| 519                             | GUI: fix DEFINES in makefile  | CoCoA-5.3.0             | Anna Maria Bigatti | 14 Feb 2020 09:22 | 1.5            |
| 265                             | Linking problems in CoCoA-5 GUI   | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:49 | 0.33           |
| 741                             | C5 GUI: slow to close   | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:46 | 2.75           |
| 239                             | Normaliz functions not available in C5 GUI (again!)                     | CoCoA-5.1.0 Easter14    | John Abbott        | 14 Apr 2014 09:15 | 8.0            |
| 197                             | ./C5.bin: fork: Resource temporarily unavailable                        |                         |                    | 05 Mar 2014 12:21 |                |
| 207                             | BuiltIn Normaliz functions not available in C5 gui                      | CoCoA-5.0.3             | Anna Maria Bigatti | 01 Aug 2012 15:09 |                |
| 52                              | GUI: problem with "--" comment  | CoCoA-5.0.3             | John Abbott        | 04 Jul 2012 10:01 | 5.0            |
| 88                              | Makefile problem with GUI on linux                                      | CoCoA-5.0.2             |                    | 02 Apr 2012 16:26 | 1.0            |
| <b>Incomplete function (34)</b> |   |                         |                    |                   |                |
| 1230                            | PrimaryDecomposition with lex ordering                                  | CoCoA-5.3.0             | Anna Maria Bigatti | 13 Feb 2020 10:09 | 1.23           |
| 1157                            | FactorAlgExt  | CoCoA-5.2.4             | Elisa Palezzato    | 31 Jul 2018 13:13 | 2.01           |
| 1133                            | Radical bug   | CoCoA-5.2.2             | Anna Maria Bigatti | 11 Dec 2017 19:19 | 2.0            |
| 1080                            | intersect: problem with zero generators                                 | CoCoA-5.2.2             | Anna Maria Bigatti | 11 Dec 2017 17:41 | 1.71           |
| 981                             | SqFreeFactor: small (or big) bug?                                       | CoCoA-5.2.2             | John Abbott        | 13 Nov 2017 15:57 | 0.75           |
| 1062                            | IsRadical bug?  | CoCoA-5.2.2             | Anna Maria Bigatti | 10 Nov 2017 12:18 |                |
| 405                             | ReducedGBasis not memorized in an ideal                                 | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 28 Apr 2017 09:14 | 2.01           |
| 880                             | subst should check that indet is in same ring as 1st arg, but does not. | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 01 Mar 2017 13:34 | 1.0            |
| 918                             | UniversalGBasis: sometimes gives error                                  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 12 Oct 2016 15:01 | 2.05           |
| 548                             | Printing rings with ID  | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 29 Jul 2015 12:43 | 7.501          |
| 643                             | GenRepr fails if there are zero generators                              | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 26 Jun 2015 12:13 | 3.0            |
| 552                             | C5 BuiltinFunctions.c fn RingElem                                       | CoCoA-5.1.1 Seoul14     | John Abbott        | 04 Sep 2014 12:18 | 1.0            |

| #                                | Subject  | Target version       | Assignee           | Updated           | Estimated time |
|----------------------------------|--|----------------------|--------------------|-------------------|----------------|
| 279                              | Bug in Radical (actually a RingHom problem)                                | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 03 Sep 2014 18:47 | 20.0           |
| 549                              | Automatic conversion from RINGELEM to INT or RAT                           | CoCoA-5.1.1 Seoul14  | John Abbott        | 03 Sep 2014 16:00 | 5.0            |
| 594                              | CharPoly(MAT) and MinPoly(MAT) work in different settings: unify behaviour | CoCoA-5.1.1 Seoul14  | Anna Maria Bigatti | 02 Sep 2014 11:03 | 2.5            |
| 382                              | Subtle bug with CoeffEmbeddingHom  | CoCoA-5.1.1 Seoul14  | John Abbott        | 28 Jul 2014 21:50 | 1.1            |
| 514                              | submodule: minimalize, minimalized   | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 09 May 2014 13:28 | 2.5            |
| 367                              | implement LF/DF for an ideal   | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 09 May 2014 12:51 | 3.5            |
| 384                              | IsZero for matrix  | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 07 May 2014 14:01 | 2.5            |
| 544                              | sorted gives wrong answer sometimes  | CoCoA-5.1.0 Easter14 | John Abbott        | 07 May 2014 13:39 | 4.0            |
| 419                              | FloatStr   | CoCoA-5.1.0 Easter14 | John Abbott        | 24 Apr 2014 19:53 | 2.0            |
| 509                              | SyzOfGens (CoCoA-5) does not have correct shifts                           | CoCoA-5.1.0 Easter14 | Anna Maria Bigatti | 10 Apr 2014 18:02 | 2.0            |
| 446                              | intersection fails with zero ideal   | CoCoA-5.0.9          | Anna Maria Bigatti | 02 Apr 2014 18:35 | 3.0            |
| 418                              | What does interreduce do?  | CoCoA-5.0.9          | Anna Maria Bigatti | 02 Apr 2014 18:30 | 2.0            |
| 226                              | HilbertBasis segv  | CoCoA-5.0.9          | Anna Maria Bigatti | 02 Apr 2014 18:30 | 6.0            |
| 318                              | implement "indent" for modules   | CoCoA-5.0.9          | Anna Maria Bigatti | 01 Aug 2013 07:29 |                |
| 166                              | Dim/Multiplicity with Lex ordering -- NYI                                  | CoCoA-5.0.3          | Anna Maria Bigatti | 21 May 2013 18:07 |                |
| 267                              | Cyclotomic(106743) fails   | CoCoA-5.0.3          | John Abbott        | 21 May 2013 18:03 |                |
| 192                              | indent prints strings without quotes                                       | CoCoA-5.0.3          | Anna Maria Bigatti | 14 Nov 2012 11:30 | 2.0            |
| 163                              | RealRootsApprox bombs  | CoCoA-5.0.3          | John Abbott        | 13 Jul 2012 15:27 |                |
| 186                              | LCM(0,x)   | CoCoA-5.0.3          | John Abbott        | 04 Jul 2012 09:57 | 2.0            |
| 98                               | RealRoots should use IsRational  | CoCoA-5.0.3          | John Abbott        | 04 Jul 2012 09:56 | 4.0            |
| 159                              | Multiplicity sometimes wrong   | CoCoA-5.0.3          | Anna Maria Bigatti | 08 Jun 2012 17:29 | 3.5            |
| 162                              | RegularityIndex <= 0   | CoCoA-5.0.3          | Anna Maria Bigatti | 08 Jun 2012 17:20 | 2.5            |
| <b>Manual/documentation (82)</b> |  |                      |                    |                   |                |
| 1539                             | Website: installation instructions for Microsoft                           | CoCoA-5.4.2          | Anna Maria Bigatti | 14 Mar 2023 11:56 |                |
| 406                              | Manual for CoCoAManual/CoCoAHelp.xml                                       | CoCoA-5.4.0          | Anna Maria Bigatti | 13 Jun 2022 15:33 | 4.0            |
| 169                              | Font for parameters in manual  | CoCoA-5.4.0          | Anna Maria Bigatti | 31 May 2022 10:35 | 4.0            |
| 1268                             | Documentation for how to write a CoCoA package                             | CoCoA-5.4.0          | Anna Maria Bigatti | 02 Mar 2022 16:14 |                |
| 1447                             | Manual entry for RandomLinearForm  | CoCoA-5.4.0          | John Abbott        | 23 Feb 2022 12:54 | 0.66           |
| 1478                             | HilbertBasis: clarify  | CoCoA-5.4.0          | Anna Maria Bigatti | 23 Feb 2022 12:28 | 0.5            |
| 1504                             | OnlineHelp: XMLFileName  | CoCoA-5.4.0          | John Abbott        | 23 Feb 2022 11:53 | 2.01           |
| 1455                             | In a release: which files inside the CoCoAManual                           | CoCoA-5.4.0          | John Abbott        | 18 Feb 2022 17:16 | 0.99           |
| 1214                             | CoCoAManual: ensure that LaTeX compilation is "clean"                      | CoCoA-5.4.0          | John Abbott        | 18 Feb 2022 17:15 | 0.55           |

| #    | Subject   | Target version | Assignee           | Updated           | Estimated time |
|------|---|----------------|--------------------|-------------------|----------------|
| 1451 | CoCoA Manual: make search keys public   | CoCoA-5.4.0    | Anna Maria Bigatti | 18 Feb 2022 17:13 | 2.5            |
| 1525 | CoCoA Manual: homogenize obsolete/obsolescent entries   | CoCoA-5.4.0    | Anna Maria Bigatti | 18 Feb 2022 17:01 | 2.44           |
| 1658 | LinKerZZ not documented   | CoCoA-5.4.0    | John Abbott        | 16 Feb 2022 20:11 | 1.01           |
| 1660 | Updating file obsolescent.cpkg5: make it easier   | CoCoA-5.4.0    | Anna Maria Bigatti | 14 Feb 2022 18:16 | 3.51           |
| 1298 | How can user find the indent command?   | CoCoA-5.4.0    | John Abbott        | 19 Mar 2021 12:43 | 1.23           |
| 1498 | Export many names or just one?  | CoCoA-5.4.0    | John Abbott        | 08 Jan 2021 11:23 | 1.11           |
| 1459 | Manual entries for mod and div  | CoCoA-5.4.0    | John Abbott        | 03 Nov 2020 22:03 | 0.99           |
| 1487 | EOF for OpenIFile   | CoCoA-5.4.0    | John Abbott        | 09 Oct 2020 13:45 | 1.99           |
| 1111 | CoCoAManual: searching for ?? mat and for ?? matrix give different results                                | CoCoA-5.4.0    | Anna Maria Bigatti | 15 May 2020 13:56 | 1.01           |
| 1333 | Typevectors   | CoCoA-5.3.0    | Anna Maria Bigatti | 30 Apr 2020 15:02 | 2.22           |
| 1027 | CoCoAManual: add a page with some emacs hints?  | CoCoA-5.3.0    | Anna Maria Bigatti | 09 Mar 2020 15:36 | 2.34           |
| 1258 | Manual page for CantStop  | CoCoA-5.3.0    | Anna Maria Bigatti | 09 Mar 2020 13:18 |                |
| 1303 | Manual looking for "?"  | CoCoA-5.3.0    | John Abbott        | 05 Mar 2020 12:03 | 0.75           |
| 1404 | Which commands should "terms" be a keyword for?   | CoCoA-5.3.0    | John Abbott        | 04 Mar 2020 19:00 | 0.75           |
| 991  | make htmldoc always recreates everything (even if no change was made)                                     | CoCoA-5.3.0    | John Abbott        | 04 Mar 2020 16:15 | 3.33           |
| 890  | ImportByRef and ImportByValue behave in an unexpected manner (i.e. fail when I think they should succeed) | CoCoA-5.3.0    | John Abbott        | 26 Feb 2020 16:50 | 1.5            |
| 1386 | IsIndetPosPower: behaviour and manual page  | CoCoA-5.3.0    | John Abbott        | 25 Feb 2020 11:16 | 0.99           |
| 1335 | ManExamples: some problems  | CoCoA-5.3.0    | John Abbott        | 24 Feb 2020 16:56 | 3.33           |
| 1400 | Title of manual entry: tutorial on operations on polynomials  | CoCoA-5.3.0    | John Abbott        | 14 Feb 2020 13:43 | 0.66           |
| 1312 | Wrong links on page about COCOA School in Sapporo   | CoCoA-5.3.0    | Anna Maria Bigatti | 14 Feb 2020 10:51 |                |
| 1315 | Manual entry about reporting bugs?  | CoCoA-5.3.0    | John Abbott        | 14 Feb 2020 10:49 | 1.01           |
| 1408 | CoCoAManual - tex: error if syntax is missing   | CoCoA-5.3.0    | Anna Maria Bigatti | 13 Feb 2020 18:59 | 2.01           |
| 1368 | Improve manual for mod  | CoCoA-5.3.0    | John Abbott        | 13 Feb 2020 15:44 | 0.77           |
| 1164 | Manual: loading manual entries written by users   | CoCoA-5.2.4    | Anna Maria Bigatti | 10 Oct 2019 19:26 | 20.0           |
| 1024 | CoCoA Manual: consistent spacing in VarName: TYPE   | CoCoA-5.3.0    | Anna Maria Bigatti | 10 Oct 2019 18:24 |                |
| 168  | Type info in CoCoA-5 manual   | CoCoA-5.3.0    | Anna Maria Bigatti | 10 Oct 2019 17:37 |                |
| 1188 | Product of empty list: manual and code disagree   | CoCoA-5.2.4    | John Abbott        | 30 Jul 2018 14:33 | 1.1            |
| 1000 | CoCoAManual for "all cocoa commands"  | CoCoA-5.2.2    | Anna Maria Bigatti | 15 Dec 2017 16:20 | 2.01           |
| 1073 | RelNotes: current version or all previous versions?   | CoCoA-5.2.2    | Anna Maria Bigatti | 15 Dec 2017 15:57 | 1.51           |
| 1074 | CoCoAManual: entry for radical  | CoCoA-5.2.2    | Anna Maria Bigatti | 15 Dec 2017 15:41 |                |
| 1023 | CoCoAManual for verbosity: how to find which levels? how to find which functions?                         | CoCoA-5.2.2    | Anna Maria Bigatti | 12 Dec 2017 11:01 |                |
| 439  | CoCoA website: download pages and installing instructions   | CoCoA-5.2.2    | Anna Maria Bigatti | 11 Dec 2017 18:14 | 3.01           |

| #    | Subject  | Target version          | Assignee           | Updated           | Estimated time |
|------|--|-------------------------|--------------------|-------------------|----------------|
| 1055 | CoCoAManual: duplication (2 pages for operators)                               | CoCoA-5.2.2             | Anna Maria Bigatti | 11 Dec 2017 17:10 |                |
| 1021 | CoCoA Manual: search should ignore multiple spaces                             | CoCoA-5.2.2             | John Abbott        | 15 Nov 2017 17:19 | 1.88           |
| 521  | Manual: automatically check all examples                                       | CoCoA-5.2.0 spring 2017 |                    | 28 Apr 2017 14:34 |                |
| 1046 | CoCoA-5 no longer lists the external libs present                              | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 27 Apr 2017 15:38 | 1.01           |
| 1040 | CoCoAManual: entry for SetVerbosityLevel/VerbosityLevel                        | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 27 Apr 2017 15:20 | 0.99           |
| 863  | CoCoA-5 manual: IsInteger and IsRational are missing?                          | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 27 Apr 2017 15:03 | 0.77           |
| 963  | Manual: XML problem with html doc  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 26 Apr 2017 16:00 | 2.0            |
| 170  | CoCoAManual HTML: page for "Try"   | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 06 Mar 2017 16:44 |                |
| 717  | CoCoAManual: improve part on RINGHOM   | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 29 Jul 2015 16:25 | 1.5            |
| 522  | Manual: duplication in "see also" and "All other matches"                      | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 29 Jul 2015 16:21 | 2.0            |
| 251  | How to add a test for CoCoA-5 (CoCoAInterpreter)                               | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 29 Jul 2015 12:12 | 1.5            |
| 466  | CoCoAManual: add entry summarising syntax of all CoCoA-5 commands              | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 29 Jul 2015 12:12 | 2.0            |
| 456  | CoCoAManual: New structure for manual?   | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 05 Sep 2014 11:38 | 3.0            |
| 556  | CoCoAManual: improve part on tagging   | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 04 Sep 2014 18:31 | 3.0            |
| 286  | How to test (automatically) a user defined CoCoA function                      | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 04 Sep 2014 13:46 |                |
| 488  | CoCoAManual: Help page for porting old C4 code to C5                           | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 04 Sep 2014 12:29 |                |
| 609  | Package "empty.cpkg5"  | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 03 Sep 2014 13:39 | 0.9            |
| 34   | CoCoAManual: obsolete entries in the manual                                    | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 02 Sep 2014 11:30 | 15.0           |
| 543  | Interpreter: problem when calling the manual with trailing spaces and comments | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 27 Aug 2014 18:19 | 2.5            |
| 558  | CoCoAManual: semi-automatic check of all input                                 | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 01 Aug 2014 10:57 | 8.0            |
| 325  | CoCoAManual: display syntax first  | CoCoA-5.0.9             | Anna Maria Bigatti | 31 Jul 2014 17:36 | 4.0            |
| 324  | Correct font for variable references in description                            | CoCoA-5.1.1 Seoul14     |                    | 31 Jul 2014 15:15 |                |
| 566  | Online help: problem with "<>"   | CoCoA-5.1.1 Seoul14     | John Abbott        | 16 Jul 2014 12:32 | 2.0            |
| 489  | CoCoAManual: Doc for strings   | CoCoA-5.1.0 Easter14    | John Abbott        | 02 Jul 2014 16:52 | 4.0            |
| 495  | CoCoAManual: add page about creating lists                                     | CoCoA-5.1.0 Easter14    | John Abbott        | 02 Jul 2014 16:51 | 1.5            |
| 176  | CoCoAManual: Doc for new commands  | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 02 Jul 2014 16:48 | 3.0            |
| 334  | CoCoAManual: entry for "and", "or", "not" operators                            | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 02 Jul 2014 16:47 | 2.0            |
| 188  | CoCoAManual: entries for operators   | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 02 Jul 2014 16:46 | 5.0            |
| 555  | CoCoAManual: improve part on language  | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 02 Jul 2014 16:40 | 20.0           |
| 542  | CoCoAManual: improve part on data-types  | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 02 Jul 2014 16:40 | 20.0           |
| 225  | HilbertBasis: cocoa vs normaliz  | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 20 May 2014 17:54 | 1.5            |
| 179  | TeX documentation for CoCoA-5  | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 14 May 2014 16:56 | 5.0            |
| 369  | write documentation for TgCone and other function from the "primary" package   | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 07 May 2014 14:07 | 2.0            |

| #                              | Subject   | Target version          | Assignee           | Updated           | Estimated time |
|--------------------------------|---|-------------------------|--------------------|-------------------|----------------|
| 463                            | Make man page for "lt" easier to read   | CoCoA-5.1.0 Easter14    | John Abbott        | 24 Apr 2014 20:26 | 3.0            |
| 341                            | Remove/replace the word "vector" in the manual                                | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 11 Apr 2014 15:06 | 0.5            |
| 394                            | problem with ContentFreeFactor (and missing manual entry)                     | CoCoA-5.0.9             | John Abbott        | 03 Apr 2014 20:10 | 0.5            |
| 370                            | OnlineHelp: Problem with "><" in syntax of CartesianProduct                   | CoCoA-5.0.9             | Anna Maria Bigatti | 21 Mar 2014 11:30 |                |
| 333                            | manual entry for "indent"   | CoCoA-5.0.3             | Anna Maria Bigatti | 21 May 2013 17:24 | 1.0            |
| 293                            | Add CpuTime to C5 manual  | CoCoA-5.0.3             | Anna Maria Bigatti | 11 Feb 2013 12:03 |                |
| 27                             | CoCoA-5 Manual  | CoCoA-5.0.2             | Anna Maria Bigatti | 01 Jun 2012 17:59 | 150.0          |
| 79                             | Sort entries in CoCoAHelp.xml and write code on OnlineHelp.C to check sorting | CoCoA-5.0.2             | Anna Maria Bigatti | 23 Jan 2012 14:11 | 0.5            |
| <b>Parser/Interpreter (60)</b> |   |                         |                    |                   |                |
| 1587                           | Multiline string literals (again)   | CoCoA-5.4.2             | John Abbott        | 14 Mar 2023 21:52 | 1.49           |
| 35                             | Optional warnings for fn-proc arity   | CoCoA-5.?.?             | John Abbott        | 07 Oct 2022 10:56 | 0.75           |
| 461                            | New keyword " ->" (same as "return")  | CoCoA-5.4.2             | John Abbott        | 26 Sep 2022 16:23 |                |
| 530                            | Interpreter error message: "for" with missing "do"                            | CoCoA-5.4.0             |                    | 03 Mar 2022 15:46 | 1.01           |
| 1613                           | CRASH with RingHom from FrF   | CoCoA-5.4.0             | Anna Maria Bigatti | 10 Nov 2021 18:07 | 2.66           |
| 1594                           | Parser bug: missing close square bracket                                      | CoCoA-5.4.0             | Anna Maria Bigatti | 14 Sep 2021 11:46 | 3.51           |
| 500                            | Interpreter: is it possible to avoid useless prompts?                         | CoCoA-5.4.0             | John Abbott        | 14 May 2021 17:43 | 7.47           |
| 531                            | Package protected variables should know which package protected them          | CoCoA-5.4.0             | Anna Maria Bigatti | 14 May 2021 17:37 | 8.0            |
| 911                            | CoCoA-5 prompt for incomplete input   | CoCoA-5.4.0             | John Abbott        | 14 May 2021 17:32 | 2.22           |
| 346                            | Describe should indicate package name   | CoCoA-5.4.0             | Anna Maria Bigatti | 19 Mar 2021 12:48 | 2.22           |
| 1543                           | Default path for packages   | CoCoA-5.4.0             | Anna Maria Bigatti | 08 Jan 2021 11:28 | 1.01           |
| 692                            | Local variables hiding out ones at top level                                  | CoCoA-5.4.0             | John Abbott        | 02 Oct 2020 11:43 | 0.99           |
| 1200                           | Package exported function: wrong package name                                 | CoCoA-5.4.0             |                    | 02 Oct 2020 07:54 | 1.01           |
| 997                            | Using protected variable names for "bound variables" (e.g. for, try...endtry) | CoCoA-5.3.0             | John Abbott        | 04 Mar 2020 19:09 | 0.99           |
| 697                            | Interpreter: Avoid outputting an empty line after each line of input          | CoCoA-5.2.2             | Anna Maria Bigatti | 11 Dec 2017 17:08 | 1.01           |
| 345                            | Interpreter interrupt delayed confusingly                                     | CoCoA-5.1.3/4 Jan 2016  | John Abbott        | 04 Dec 2017 11:45 | 2.01           |
| 1045                           | Error message from cocoalib to cocoa-5  | CoCoA-5.2.0 spring 2017 | Anna Maria Bigatti | 28 Apr 2017 19:21 | 1.01           |
| 1018                           | Interpreter: limit range for "." operator                                     | CoCoA-5.2.0 spring 2017 | John Abbott        | 28 Apr 2017 16:20 | 1.44           |
| 478                            | Use of dollar-dot (\$) in packages  | CoCoA-5.2.0 spring 2017 | John Abbott        | 05 Sep 2016 12:39 | 0.7            |
| 782                            | BuiltinFunctions -- getting too long again!                                   | CoCoA-5.1.3/4 Jan 2016  | Anna Maria Bigatti | 16 Feb 2016 17:58 | 2.0            |
| 352                            | Should SourceRegion echo the "region"?  | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 30 Jul 2015 14:19 | 4.44           |
| 317                            | BuiltInFunctions: evalArgAsLong   | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 29 Jul 2015 16:15 | 3.01           |
| 706                            | meaningful error for IDEAL <= IDEAL   | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 28 Jul 2015 14:32 | 1.0            |

| #   | Subject  | Target version          | Assignee           | Updated           | Estimated time |
|-----|--|-------------------------|--------------------|-------------------|----------------|
| 668 | Remove keyword "weights"?  | CoCoA-5.1.2 summer 2015 | Anna Maria Bigatti | 27 Jul 2015 15:16 | 4.01           |
| 104 | Misprints suggestions: Z --> ZZ  | CoCoA-5.1.1 Seoul14     | John Abbott        | 11 Sep 2014 17:38 | 3.0            |
| 294 | BuiltInFunctions: General "OneLiner" for arguments of different type                   | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 05 Sep 2014 11:51 | 2.0            |
| 307 | Value::from makes BigIntValue::fromInt obsolete?                                       | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 05 Sep 2014 11:43 | 1.0            |
| 595 | rename BigIntValue, IdealValue --> INTValue, IDEALValue? or even INT, IDEAL?           | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 04 Sep 2014 13:33 | 10.0           |
| 321 | interpreter proposes no near misses for "bin"  | CoCoA-5.1.1 Seoul14     | John Abbott        | 04 Sep 2014 12:54 | 4.1            |
| 563 | Remove ZMOD type from CoCoAInterpreter   | CoCoA-5.1.1 Seoul14     | John Abbott        | 01 Sep 2014 18:30 | 2.0            |
| 378 | Ungraceful behaviour: Source inside For loop   | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 27 Aug 2014 18:06 | 2.0            |
| 403 | Misuse of dot-dot operator   | CoCoA-5.1.1 Seoul14     | John Abbott        | 29 Jul 2014 16:26 | 2.2            |
| 524 | BuiltInFunctions: remove calls to WrongTypeException                                   | CoCoA-5.1.1 Seoul14     | Anna Maria Bigatti | 28 Jul 2014 11:48 | 3.0            |
| 576 | Disallow juxtaposition for string literals?  | CoCoA-5.1.1 Seoul14     | John Abbott        | 26 Jun 2014 15:33 |                |
| 182 | Unescaped double quote inside superstring  | CoCoA-5.1.1 Seoul14     | John Abbott        | 26 Jun 2014 15:11 | 7.5            |
| 473 | Multiline string literals - useful or obsolescent?                                     | CoCoA-5.1.0 Easter14    | John Abbott        | 07 May 2014 17:32 | 5.0            |
| 208 | describe \$package   | CoCoA-5.1.0 Easter14    | Anna Maria Bigatti | 06 May 2014 18:14 | 2.0            |
| 471 | Nested multiline comments  | CoCoA-5.1.0 Easter14    | John Abbott        | 02 May 2014 17:49 | 5.0            |
| 481 | Multiline comments -- obsolescent?   | CoCoA-5.1.0 Easter14    | John Abbott        | 02 May 2014 17:47 | 4.0            |
| 94  | Default reason for protected variables   | CoCoA-5.1.0 Easter14    | John Abbott        | 24 Apr 2014 13:16 | 3.0            |
| 284 | BuiltInFunctions: more flexible typing in one-line function declaration                | CoCoA-5.1.0 Easter14    |                    | 08 Apr 2014 08:25 | 0.25           |
| 364 | Incr command/function  | CoCoA-5.0.9             | John Abbott        | 03 Apr 2014 20:20 | 1.0            |
| 105 | Add I*f and f*I (RINGELEM and IDEAL)   | CoCoA-5.0.9             | John Abbott        | 01 Apr 2014 18:46 | 3.0            |
| 306 | Function for accessing the pointed value   | CoCoA-5.0.9             | Anna Maria Bigatti | 21 Mar 2014 11:31 |                |
| 193 | BuiltInFunctions.C getting too long (2000 lines)                                       | CoCoA-5.0.9             | Anna Maria Bigatti | 01 Aug 2013 08:10 |                |
| 393 | add Value::from(HPSeries)  | CoCoA-5.0.9             | Anna Maria Bigatti | 01 Aug 2013 07:35 |                |
| 392 | add Value::from(factorization<..>)   | CoCoA-5.0.9             | Anna Maria Bigatti | 01 Aug 2013 07:32 |                |
| 344 | basic_string::erase error in interpreter   | CoCoA-5.0.3             | John Abbott        | 24 May 2013 18:55 |                |
| 343 | Interpreter SEGV   | CoCoA-5.0.3             | John Abbott        | 24 May 2013 14:41 |                |
| 102 | Packages: should exported functions be automatically "Protect"ed?                      | CoCoA-5.0.3             | John Abbott        | 18 Feb 2013 18:30 |                |
| 185 | Banner for CoCoA-5   | CoCoA-5.0.3             | Anna Maria Bigatti | 04 Jul 2012 10:03 |                |
| 189 | malloc ERROR   | CoCoA-5.0.3             | John Abbott        | 04 Jul 2012 10:01 |                |
| 103 | Bad error mesg using operator ":"  | CoCoA-5.0.3             | John Abbott        | 04 Jul 2012 09:57 | 2.0            |
| 194 | Unhandled CoCoALib error: mixed rings with IsIn operator (for ideal membership)        | CoCoA-5.0.3             | John Abbott        | 04 Jul 2012 09:56 |                |
| 201 | segmentation fault with function defined in package ("PrintHGIndices"): First and Last | CoCoA-5.0.3             | Anna Maria Bigatti | 04 Jul 2012 09:45 | 1.5            |
| 137 | JAA does not like the name IndetInd  | CoCoA-5.0.3             | Anna Maria Bigatti | 08 Jun 2012 17:30 | 3.25           |

| #                       | Subject  | Target version         | Assignee           | Updated           | Estimated time |
|-------------------------|--|------------------------|--------------------|-------------------|----------------|
| 115                     | PP ordering bug  | CoCoA-5.0.2            | Anna Maria Bigatti | 28 Mar 2012 14:29 | 1.0            |
| 108                     | Unhandled division by zero in FFp  | CoCoA-5.0.2            | Anna Maria Bigatti | 20 Mar 2012 16:21 | 2.0            |
| 109                     | SmoothFactor should allow large first arg  | CoCoA-5.0.2            | Anna Maria Bigatti | 19 Mar 2012 18:01 | 0.5            |
| 33                      | Modify the packages so that -w3 produces no warnings during start-up                       | CoCoA-5.0.2            | Anna Maria Bigatti | 23 Jan 2012 14:13 | 4.3            |
| <b>Portability (22)</b> |  |                        |                    |                   |                |
| 1675                    | Version 5.4.0 requires Visual C++ Runtime 2013 on Windows                                  | CoCoA-5.4.2            |                    | 31 Mar 2024 20:40 |                |
| 1695                    | boost-find-lib.sh  | CoCoA-5.4.2            | John Abbott        | 09 Mar 2023 22:42 | 0.88           |
| 632                     | MacOSX: many warnings with compiler CLANG/LLVM when compiling BOOST code.                  | CoCoA-5.1.3/4 Jan 2016 | John Abbott        | 14 Oct 2022 16:25 |                |
| 1479                    | CoCoA release for linux: CoCoAInterpreter: with and without libreadline?                   | CoCoA-5.4.0            | John Abbott        | 16 Feb 2022 20:07 | 6.8            |
| 1524                    | wrong SystemCommand exit value   | CoCoA-5.4.0            | John Abbott        | 16 Feb 2022 19:53 | 0.66           |
| 922                     | Release for MacOS: compilation on 10.11 incompatible with 10.6.8                           | CoCoA-5.4.0            | Anna Maria Bigatti | 09 Feb 2022 19:41 | 1.25           |
| 1294                    | CoCoA-5 tests may fail even if executed correctly  | CoCoA-5.4.0            | John Abbott        | 03 Feb 2022 19:40 | 2.75           |
| 1356                    | CoCoA-5 header files: should use a common prefix for CPP variables which enforce read-once | CoCoA-5.4.0            | John Abbott        | 12 Nov 2021 10:45 | 1.11           |
| 1307                    | Linking problem  | CoCoA-5.3.0            |                    | 05 Sep 2019 16:17 |                |
| 545                     | Compiler g++ 4.2.1 (clang-503.0.40) on MacOSX 10.9: warnings and errors                    | CoCoA-5.2.2            |                    | 12 Mar 2019 16:40 | 10.0           |
| 1007                    | (makefile) New "clean" target which does not clean documentation                           | CoCoA-5.2.4            | John Abbott        | 30 Jul 2018 18:02 | 7.7            |
| 988                     | Makefile: install target for cocoa5  | CoCoA-5.2.2            | John Abbott        | 15 Dec 2017 15:46 |                |
| 117                     | Added 3 times defn of isblank fn   | CoCoA-5.1.3/4 Jan 2016 | John Abbott        | 17 Feb 2016 13:25 | 2.0            |
| 541                     | Unify releases for Linux 32 and Linux 64   | CoCoA-5.1.1 Seoul14    | John Abbott        | 11 Sep 2014 17:40 |                |
| 245                     | Meaningful error for functions defined in "missing" external library                       | CoCoA-5.1.1 Seoul14    | Anna Maria Bigatti | 11 Sep 2014 17:40 |                |
| 338                     | MacOS version with static gcc libraries  | CoCoA-5.1.1 Seoul14    | Anna Maria Bigatti | 04 Sep 2014 12:39 | 8.0            |
| 447                     | CoCoA-5.0.3 Microsoft std::bad_alloc   | CoCoA-5.1.0 Easter14   | Anna Maria Bigatti | 22 May 2014 17:20 | 2.0            |
| 118                     | unistd and call to access in Main.C  |                        | John Abbott        | 20 Mar 2014 17:22 | 8.0            |
| 191                     | Slow lex gbasis  | CoCoA-5.0.3            | John Abbott        | 21 May 2013 18:33 |                |
| 217                     | Makedependencies of CoCoA-5 fails if BOOST is absent                                       | CoCoA-5.0.3            | John Abbott        | 21 May 2013 18:32 | 4.0            |
| 220                     | Trouble on Linux: many CoCoA-5 tests fail (0.9952)   | CoCoA-5.0.3            | John Abbott        | 21 May 2013 18:31 | 3.0            |
| 249                     | BuiltIn Normaliz functions not available in CoCoA5Interpreter                              | CoCoA-5.0.3            | Anna Maria Bigatti | 21 May 2013 18:09 |                |
| <b>Release (29)</b>     |  |                        |                    |                   |                |
| 1471                    | Release CoCoA-5.4.0  | CoCoA-5.4.0            |                    | 13 Jun 2022 15:33 |                |
| 1443                    | Illegal instruction  | CoCoA-5.4.0            | John Abbott        | 03 Feb 2022 19:37 | 4.19           |

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