

CoCoALib - Issues

| # | Project | Parent task | Priority | Subject | Assignee | Updated | Category | % Done |
|------|----------|-------------|----------|---|--------------------|-------------------|-----------|--------|
| 1786 | CoCoALib | | Normal | Add new function for IsInRadical for monomial ideals? (RadicalMembership) | Anna Maria Bigatti | 01 Mar 2024 18:37 | Improving | 10 |
| 740 | CoCoALib | | Normal | Addition of sparse (multivariate) polynomials | | 17 Jun 2016 14:35 | Improving | 0 |
| 420 | CoCoALib | | Normal | Allow user to give a name to a ring | | 13 May 2015 09:55 | Improving | 0 |
| 1730 | CoCoALib | | Normal | ApplySPRCodomain: relax power/exponent check | | 27 Nov 2023 20:30 | Improving | 0 |
| 743 | CoCoALib | | Urgent | Better errors: give supplementary info about the error | | 15 Mar 2024 18:33 | Improving | 10 |
| 1117 | CoCoALib | | Normal | Better printing of negative coeffs | | 23 Sep 2019 11:52 | Improving | 10 |
| 1513 | CoCoALib | | Normal | Better test for univariate-ness (and better conversion) | | 16 Mar 2024 21:38 | Improving | 0 |
| 1346 | CoCoALib | | Normal | C++14: use the new for loop syntax where appropriate (like cocoa's foreach) | | 22 Apr 2024 21:08 | Improving | 80 |
| 1576 | CoCoALib | | Normal | cmp for machine integers | John Abbott | 21 Jan 2024 20:23 | Improving | 20 |
| 1798 | CoCoALib | | Normal | Computing in sub polyring | | 22 Mar 2024 09:30 | Improving | 0 |
| 758 | CoCoALib | | Normal | configure: have option to say to look for external libs | | 03 Sep 2015 11:41 | Improving | 10 |
| 1378 | CoCoALib | | Normal | Create two separate radical fns (for 0-dim ideals) | | 03 Jul 2023 17:49 | Improving | 0 |
| 1559 | CoCoALib | | Normal | Default ctor for rings | | 13 Mar 2024 20:42 | Improving | 10 |
| 1756 | CoCoALib | | Normal | deg(f) is slow if f is long | John Abbott | 21 Mar 2024 20:40 | Improving | 50 |
| 1280 | CoCoALib | | High | Determinant & Inverse of matrix over non integral domain | John Abbott | 21 Jan 2024 19:43 | Improving | 40 |
| 884 | CoCoALib | | Normal | DistrMPolyInIPP::myPushFront and DistrMPolyInIPP::myPushBack inefficient if arg is a PP | | 24 May 2016 15:25 | Improving | 0 |
| 1419 | CoCoALib | | Low | DynamicBitset::lamAll1s | | 03 Feb 2021 18:18 | Improving | 0 |
| 1588 | CoCoALib | | Low | ElimMat is slow | | 22 Mar 2024 09:29 | Improving | 0 |
| 837 | CoCoALib | | Normal | factor is very slow on some simple input polynomials | | 06 Jan 2016 14:40 | Improving | 0 |
| 874 | CoCoALib | | Normal | factor: too slow on largish multivariate poly | John Abbott | 26 Feb 2019 16:29 | Improving | 20 |
| 1733 | CoCoALib | | Low | FactorINT: funny order | John Abbott | 22 Apr 2024 19:51 | Improving | 60 |
| 1582 | CoCoALib | | Normal | Factorization in $K(a,b)[x,y]$ | | 07 Mar 2024 20:23 | Improving | 0 |
| 785 | CoCoALib | | Normal | finite fields: global register of fields already created? | | 15 Oct 2015 17:27 | Improving | 0 |
| 1371 | CoCoALib | | Low | French students' example with GFan | | 27 Nov 2019 15:53 | Improving | 10 |
| 1667 | CoCoALib | | Urgent | GBasis over ZZ: port to CoCoALib | | 29 Apr 2024 21:13 | Improving | 10 |
| 1757 | CoCoALib | | Normal | gcd(f,f) is slow | | 16 Feb 2024 09:57 | Improving | 0 |
| 987 | CoCoALib | | Normal | GCD: add special case if args are monomials | | 28 Nov 2016 22:04 | Improving | 0 |
| 1359 | CoCoALib | | Normal | gcd: low degree but big coeffs can be slow | | 30 Oct 2019 22:23 | Improving | 0 |
| 1668 | CoCoALib | | Normal | Generalize prim | | 31 Jan 2024 22:03 | Improving | 0 |

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| 780 | CoCoALib | | Normal | GroebnerFan/ExternalLib-GFan: improve package | Anna Maria Bigatti | 21 Apr 2017 11:06 | Improving | 20 |
| 1069 | CoCoALib | | Normal | GroebnerFan: ERROR: Matrix must be invertible | | 17 Dec 2018 15:16 | Improving | 10 |
| 1737 | CoCoALib | | Normal | Homogenization of an ideal with ZZ^1-grading | Anna Maria Bigatti | 01 Feb 2024 19:59 | Improving | 20 |
| 1349 | CoCoALib | | Normal | ideal ctor where given gens are a gbasis | | 16 Feb 2024 09:52 | Improving | 10 |
| 1267 | CoCoALib | | Normal | Ideal equality | | 09 Apr 2019 17:48 | Improving | 10 |
| 1269 | CoCoALib | | Normal | Ideal Ops: sort-cuts for trivial args? | | 04 Apr 2019 15:07 | Improving | 0 |
| 1750 | CoCoALib | | Normal | IdealOfPoints: allow duplicate points? | John Abbott | 08 Mar 2024 18:23 | Improving | 20 |
| 1255 | CoCoALib | | Normal | Ideals with trivial GBasis | | 08 Mar 2023 19:49 | Improving | 0 |
| 882 | CoCoALib | | Normal | Impl faster multiplication for DUP (dense univariate polys) | | 09 May 2016 22:10 | Improving | 0 |
| 1645 | CoCoALib | | Normal | Implement monic0(f) for the case monic(0)? | | 16 Feb 2024 09:38 | Improving | 10 |
| 1657 | CoCoALib | | Normal | Improve CertifyNotPower | | 31 Jan 2024 22:03 | Improving | 0 |
| 1323 | CoCoALib | | Normal | Improve RealRoots: compute sqfr decomp | | 30 Sep 2019 16:14 | Improving | 0 |
| 1324 | CoCoALib | | Normal | Improve RootBound | | 30 Oct 2019 21:44 | Improving | 10 |
| 967 | CoCoALib | | Normal | Improve saturate | Anna Maria Bigatti | 22 Mar 2024 10:18 | Improving | 70 |
| 1642 | CoCoALib | | Normal | interreduce: make monic if over finite field? | John Abbott | 16 Feb 2024 20:44 | Improving | 20 |
| 1637 | CoCoALib | | Low | Intersection of Ideals: has GBasis? | | 16 Feb 2024 17:25 | Improving | 0 |
| 1683 | CoCoALib | | Immediate | Islrred in ZZ[x,y] | John Abbott | 16 Feb 2024 09:39 | Improving | 0 |
| 846 | CoCoALib | | Normal | Islrred: correct design? | John Abbott | 26 Feb 2019 16:32 | Improving | 20 |
| 872 | CoCoALib | | Urgent | LinSolve for matrices over FFp | John Abbott | 08 Mar 2024 17:36 | Improving | 30 |
| 1266 | CoCoALib | | Normal | Make a poly ring QQ[x,y,z] also contain a ZZ[x,y,z] | | 28 Mar 2019 16:42 | Improving | 0 |
| 1187 | CoCoALib | | Normal | Matrix rank is slow (over QQ) | | 26 Jun 2018 11:29 | Improving | 0 |
| 1742 | CoCoALib | | Normal | MinGens could be faster | Anna Maria Bigatti | 18 May 2023 13:44 | Improving | 10 |
| 1796 | CoCoALib | | Normal | myFinalizeGBasis ("Final clean up") should be more flexible | Anna Maria Bigatti | 22 Mar 2024 16:19 | Improving | 30 |
| 896 | CoCoALib | | Normal | myIsEqual, myCmp: direct comparisons between RingElem and MachineInt, BigInt and BigRat? | | 25 Jun 2018 15:31 | Improving | 10 |
| 1394 | CoCoALib | | Low | Oddly slow GBasis computation (slow final cleanup) | Anna Maria Bigatti | 16 Apr 2024 22:46 | Improving | 70 |
| 688 | CoCoALib | | Normal | PolyAlgebraHom (PolyRingHom) evaluate multivariate polynomials | | 22 Apr 2015 14:38 | Improving | 10 |
| 775 | CoCoALib | | Low | PPMonoid with 1 extra "exponent"? | | 15 Sep 2015 20:18 | Improving | 0 |
| 842 | CoCoALib | | Normal | PPMonoidSparse: comparisons are VERY SLOW | | 15 Feb 2016 13:57 | Improving | 0 |

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| 1337 | CoCoALib | | Normal | PrimaryDecomposition: a interesting/pathological example | Anna Maria Bigatti | 08 Mar 2023 21:13 | Improving | 10 |
| 1156 | CoCoALib | | Normal | Printing for RingElem | | 08 Jan 2020 23:02 | Improving | 0 |
| 1059 | CoCoALib | | Normal | Printing ring for ideals (or just for ideals 0 and 1) | | 05 May 2017 16:58 | Improving | 10 |
| 930 | CoCoALib | | Low | Printing TwinFloat as (rational) coeff without brackets | | 24 Sep 2016 21:43 | Improving | 0 |
| 1705 | CoCoALib | | Normal | ProgressReporter: prepare for new loop? | John Abbott | 25 Apr 2024 21:40 | Improving | 80 |
| 1103 | CoCoALib | | Normal | Pseudo-zero-dim ideals | Anna Maria Bigatti | 05 Nov 2021 16:09 | Improving | 30 |
| 974 | CoCoALib | | Normal | QIR/RealRootRefine: improve behaviour if input interval has "nasty" endpoints | | 01 Mar 2021 21:25 | Improving | 10 |
| 1417 | CoCoALib | | Normal | RadicalZeroDim with extra parameter for GBasis timeout | Anna Maria Bigatti | 16 Mar 2024 21:42 | Improving | 20 |
| 1369 | CoCoALib | | Low | RandomUnimodularMat is slow with many iters | | 09 Jan 2020 12:19 | Improving | 10 |
| 1685 | CoCoALib | | Normal | RingBase::mySwap needed? | | 07 Mar 2024 20:49 | Improving | 10 |
| 1370 | CoCoALib | | Low | RingID counter increased inside some functions | | 31 Jan 2024 22:19 | Improving | 0 |
| 1643 | CoCoALib | | Normal | rref slower than expected (maybe) [[reduced row echelon form]] | | 01 Mar 2024 09:54 | Improving | 0 |
| 1485 | CoCoALib | | Normal | Simple syntax for making a quotient ring? | | 08 Mar 2023 19:51 | Improving | 0 |
| 1706 | CoCoALib | | Normal | slimgb: Brickenstein, singular | | 30 Oct 2022 20:30 | Improving | 0 |
| 968 | CoCoALib | | Normal | Slow NF example | | 10 Nov 2016 21:33 | Improving | 10 |
| 777 | CoCoALib | | Normal | SLUG: elimination | Anna Maria Bigatti | 22 Mar 2024 18:12 | Improving | 10 |
| 1118 | CoCoALib | | Low | SLUG: factorization of x^{9999} | | 31 Jan 2024 22:20 | Improving | 10 |
| 1070 | CoCoALib | | Normal | Slug: MakeTermOrd (rk calls in RemoveRedundantRows) | Anna Maria Bigatti | 17 May 2017 13:47 | Improving | 10 |
| 1057 | CoCoALib | | High | Slug: Polynomial ring constructor slow with (big) matrix ordering | Anna Maria Bigatti | 22 Mar 2024 09:31 | Improving | 50 |
| 1518 | CoCoALib | | Normal | SLUG: Printing PPs with many indets | | 15 Feb 2024 22:45 | Improving | 20 |
| 904 | CoCoALib | | Normal | SmallFpDouble: which impl of InvMod to use? | | 04 Jul 2016 13:45 | Improving | 0 |
| 869 | CoCoALib | | Normal | SmallFpImpl: different repr for computation and for storage? | | 22 Apr 2016 15:14 | Improving | 0 |
| 797 | CoCoALib | | Normal | SmallFpImpl: make it faster | John Abbott | 24 Apr 2024 23:04 | Improving | 20 |
| 839 | CoCoALib | | Low | SparsePolyIter: make more compatible with STL | | 07 Mar 2024 20:01 | Improving | 10 |
| 1130 | CoCoALib | | Normal | SqFreeFactor: should it work over ZZ? | | 05 Apr 2019 15:39 | Improving | 10 |
| 1446 | CoCoALib | | Normal | Start using C++14 "move" capability | | 08 Mar 2024 18:00 | Improving | 10 |
| 1492 | CoCoALib | | Low | submat of a submat | | 16 Feb 2024 17:28 | Improving | 0 |
| 1692 | CoCoALib | | Normal | Suggestion: Add "JumpTo" function to prime iterators | | 15 Feb 2024 22:39 | Improving | 10 |

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| 1682 | CoCoALib | | Normal | swap for new classes | | 16 Feb 2024 09:35 | Improving | 10 |
| 598 | CoCoALib | | Normal | Syzygy for modules: non-homogeneous module | Anna Maria Bigatti | 27 Mar 2024 17:31 | Improving | 40 |
| 1802 | CoCoALib | | Normal | Tidying ideal generators (for non-polynomial ideals) | | 25 Mar 2024 19:05 | Improving | 0 |
| 710 | CoCoALib | | Normal | Update normaliz interface? | | 16 Feb 2024 18:25 | Improving | 10 |
| 1793 | CoCoALib | | Normal | Use ErrorContext instead of string FnName | | 26 Mar 2024 11:50 | Improving | 60 |
| 1572 | CoCoALib | | Normal | Use noexcept | John Abbott | 23 Apr 2024 21:57 | Improving | 70 |
| 799 | CoCoALib | | Low | vector of "indets" in each PPMonoid? | John Abbott | 11 Nov 2015 13:47 | Improving | 20 |
| 1764 | CoCoALib | | Low | Verbosity messages: avoid printing BIG values | | 25 Apr 2024 21:44 | Improving | 10 |
| 742 | CoCoALib | | Normal | View PP exponent vector (and order vector?) as an array of long? | | 01 Sep 2015 12:08 | Improving | 10 |
| 970 | CoCoALib | | Normal | Weights in ElimMat? | | 11 Nov 2016 15:49 | Improving | 10 |
| 329 | CoCoALib | | Normal | Why is DMPI slower than DMPClean? | | 13 May 2015 09:54 | Improving | 0 |