

CoCoALib - Feature #304

Module ordering and grading (and shifts)

11 Feb 2013 15:59 - Anna Maria Bigatti

Status:	Closed	Start date:	11 Feb 2013
Priority:	High	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	100%
Category:	New Function	Estimated time:	15.00 hours
Target version:	CoCoALib-0.99534 Seoul14	Spent time:	11.50 hours
Description Set the interface for ordering and grading (and then shifts) Add tests and examples. Port to CoCoA5			
Related issues:			
Related to CoCoA-5 - Feature #200: add modules and module operations		Closed	29 Jun 2012
Related to CoCoALib - Design #297: Modules design: brainstorming		In Progress	25 Jan 2013
Related to CoCoALib - Design #305: FreeModule: unique copy?		In Progress	12 Feb 2013

History

#1 - 11 Feb 2013 18:31 - Anna Maria Bigatti

Now the function **NewFreeModule(R, n)** calls **NewGradedFreeModule(R, n)** when **R** is a polynomial ring (more precisely a **SparsePolyRing**).

The only relevant function now (just to see it works ;-)) is

- **IsHomog** for a MODULEELEM (working only if **Rn** is a graded free module)

#2 - 12 Feb 2013 10:55 - Anna Maria Bigatti

- Category set to New Function

- Status changed from New to In Progress

- Assignee set to Anna Maria Bigatti

- Priority changed from Normal to High

- % Done changed from 0 to 20

#3 - 17 May 2013 18:44 - Anna Maria Bigatti

major rewriting in progress

#4 - 17 May 2013 19:27 - Anna Maria Bigatti

compiles and runs: I'll check on Monday if it gives the correct result ;-)

#5 - 28 May 2013 08:59 - Anna Maria Bigatti

- % Done changed from 20 to 40

fixed bug on shifts

added test

CVS'ed

#6 - 01 Aug 2013 12:11 - Anna Maria Bigatti

- Subject changed from *Module ordering and grading* to *Module ordering and grading (and shifts)*
- % Done changed from 40 to 60

#7 - 29 Oct 2013 13:47 - Anna Maria Bigatti

- Target version changed from *CoCoALib-0.9953* to *CoCoALib-0.99532*

#8 - 01 Apr 2014 19:13 - Anna Maria Bigatti

- Target version changed from *CoCoALib-0.99533* to *CoCoALib-0.99533 Easter14*

#9 - 08 Apr 2014 18:15 - Anna Maria Bigatti

- Target version changed from *CoCoALib-0.99533 Easter14* to *CoCoALib-0.99534 Seoul14*

#10 - 14 Jul 2014 18:22 - Anna Maria Bigatti

- % Done changed from 60 to 70
- Estimated time set to 15.00 h

I made some tests (and checked with Hilbert series) and it seems that shifts are done and OK. Added some documentation.

#11 - 31 Jul 2014 15:01 - Anna Maria Bigatti

- Status changed from *In Progress* to *Closed*
- % Done changed from 70 to 100

I think it is all done (naive resolutions work).
If some wrong aspect arises it'll become a new specific issue.