CoCoALib - Design #305

FreeModule: unique copy?

12 Feb 2013 11:38 - Anna Maria Bigatti

Status:	In Progress		**Start date:**	12 Feb 2013
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	10%
Category:	Tidying		**Estimated time:**	0.00 hour
Target version:	CoCoALib-1.0		**Spent time:**	0.10 hour

Description

While writing this I gave myself the answer "probably NO", this is the reason:

- **general case**: just one constructor "NewFreeModule(R, n)", here it seems to make sense.
- **special case (but the most important for CoCoA)**: we can have different shifts and module orderings (TOPos, PosTO, and more)

I wrote this just to remember and collect comments.

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 - Feature #304: Module ordering and grading (and shifts)	**Closed**	**11 Feb 2013**
Related to CoCoA-5 - Feature #331: Is it possible to have R^3 for NewFreeModu...	**Rejected**	**15 Mar 2013**

History

#1 - 21 Feb 2013 16:22 - Anna Maria Bigatti

Big problem: **operator==**
for **ring** equality is strict (only if pointers are equal)
for **ideal** equality is "mathematical" (I subset of J and viceversa)

What about **module**?
a **FreeModule** behaves like a **ring**
a **submodule** behaves like an **ideal**

How to distiguish clearly between these meanings of equality?

#2 - 21 Feb 2013 16:50 - Anna Maria Bigatti

should we allow **submodules** only for **FreeModules**?

#3 - 21 Feb 2013 16:52 - Anna Maria Bigatti

- Category set to Tidying

- Target version set to CoCoALib-0.9953

#4 - 23 May 2013 08:14 - Anna Maria Bigatti

- Status changed from New to In Progress

- % Done changed from 0 to 10

#5 - 29 Oct 2013 13:40 - Anna Maria Bigatti

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

#6 - 01 Apr 2014 17:29 - Anna Maria Bigatti

- Target version changed from CoCoALib-0.99532 to CoCoALib-0.99533 Easter14

#7 - 08 Apr 2014 18:38 - John Abbott

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

#8 - 14 Jul 2014 11:07 - Anna Maria Bigatti

- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-1.0

#9 - 10 Dec 2023 20:43 - John Abbott

ANNA What is the status of this?
Feasible to complete before 0.99850?