

## CoCoA-5 - Feature #331

### Is it possible to have $R^3$ for NewFreeModule(R,3)?

15 Mar 2013 15:14 - Anna Maria Bigatti

<b>Status:</b>	Rejected	<b>Start date:</b>	15 Mar 2013
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Anna Maria Bigatti	<b>% Done:</b>	100%
<b>Category:</b>	CoCoA-5 function: new	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	CoCoA-5.0.9	<b>Spent time:</b>	1.75 hour
<b>Description</b>			
<b>Related issues:</b>			
Related to CoCoALib - Design #305: FreeModule: unique copy?			<b>In Progress</b> <b>12 Feb 2013</b>

#### History

##### #1 - 15 Mar 2013 16:52 - Anna Maria Bigatti

- Status changed from New to Rejected
- % Done changed from 0 to 100

The answer is yes.

I implemented all the code (in Interpreter.C: `opPower_Ring_BigInt` and `opPowerMap`), but the problem is that it makes it too easy to create **new** free modules, which will be all different!

So I commented the code and  $R^3$  is not available.

##### #2 - 15 Mar 2013 17:01 - John Abbott

The ring  $R$  could keep a list of freemodules based on itself, and  $R^3$  then only needs to check whether it has already been created... This might be "awkward" for multithreaded applications which "create" repeatedly the same free module, otherwise I do not see any major problems.