

## CoCoA-5 - Design #646

### Unique copies of free modules?

10 Nov 2014 16:33 - John Abbott

|  |                     |                        |                    |
|--|---------------------|------------------------|--------------------|
| <b>Status:</b>   | New                 | <b>Start date:</b>     | 10 Nov 2014        |
| <b>Priority:</b>   | Normal              | <b>Due date:</b>       |                    |
| <b>Assignee:</b>   |                     | <b>% Done:</b>         | 0%                 |
| <b>Category:</b>   | enhancing/improving | <b>Estimated time:</b> | 0.00 hour          |
| <b>Target version:</b>   | CoCoA-5.?.?         | <b>Spent time:</b>     | 0.50 hour          |
| <b>Description</b>   |                     |                        |                    |
| A recent bug report from Oneto suggests that it is surprising/unnatural that NewFreeModule should create distinct (canonically isomorphic) free modules; she expected the two modules to be identical. |                     |                        |                    |
| Discuss having unique free modules.  |                     |                        |                    |
| <b>Related issues:</b>   |                     |                        |                    |
| Related to CoCoA-5 - Design #483: Unique copies of rings in CoCoA-5  |                     | <b>New</b>             | <b>19 Mar 2014</b> |
| Related to CoCoALib - Design #647: Unique copies of free modules?  |                     | <b>New</b>             | <b>10 Nov 2014</b> |

### History

#### #1 - 10 Nov 2014 16:42 - John Abbott

I propose putting all the technical discussion in [#647](#), a parallel issue to this one (since practically all the real implementation will be in CoCoALib).

This issue is useful for any discussions about "interface" in CoCoA-5.