

CoCoA-5 - Bug #1623

EmacsUI: annoying colours

18 Oct 2021 11:58 - John Abbott

Status:	Feedback	Start date:	18 Oct 2021
Priority:	Low	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	90%
Category:	EmacsUI	Estimated time:	0.00 hour
Target version:	CoCoA-5.4.2	Spent time:	2.20 hours
Description			
I have now found examples where the EmacsUI can change colours annoyingly: printing out homomorphisms.			
<pre>use P ::= QQ[x,y]; images := [x^2,y^3]; PolyAlgebraHom(P,P, images);</pre>			
The use of double-minus inside the arrows confuses emacs (which interprets them as comment starts).			

History

#1 - 18 Oct 2021 12:01 - John Abbott

I suppose we could change the printed form to something like this:

```
RingHom(FromRing = RingWithID(3, "QQ[x,y]"), ToRing = RingWithID(3, "QQ[x,y]") sending (x |-> x^2) & (y |-> y^3))
```

Or maybe **domain** and **codomain** instead of FromRing and ToRing?

Notice that I have also changed the "mapsto" symbols (to avoid the double minus).

What do you think?

#2 - 04 Nov 2021 22:59 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

Now that I must consider how ringhoms are printed, I do think that readability of the current format is not so good. Part of the problem is that rings are currently printed out in an ugly way.

Maybe I should just implement a new format, and see who screams?

#3 - 05 Nov 2021 16:40 - Anna Maria Bigatti

John Abbott wrote:

I suppose we could change the printed form to something like this:

[...]

Or maybe **domain** and **codomain** instead of FromRing and ToRing?

Notice that I have also changed the "mapsto" symbols (to avoid the double minus).

What do you think?

this is my proposal:

```
RingHom(RingWithID(3, "QQ[x,y]") -> RingWithID(3, "QQ[x,y]") sending (x to x^2) & (y to y^3))
```

#4 - 03 Feb 2022 19:16 - John Abbott

- Target version changed from CoCoA-5.4.0 to CoCoA-5.4.2

#5 - 15 Jan 2024 19:54 - John Abbott

Can we conclude this discussion, implement, and close? :-)

#6 - 16 Jan 2024 15:52 - Anna Maria Bigatti

New suggestion (the most compact I can think of)

```
RingHom(RingWithID(3, "QQ[x,y]") -> RingWithID(3, "QQ[x,y]") sending (x,y) to (x^2, y^3) )
```

#7 - 16 Jan 2024 19:07 - John Abbott

- % Done changed from 10 to 20

Not bad! Minor variant: using square brackets for lists

```
RingHom(RingWithID(3, "QQ[x,y]") -> RingWithID(3, "QQ[x,y]") sending [x,y] to [x^2, y^3] )
```

I still have some reservations about readability of the FromRing -> ToRing part, but do not really have a better suggestion. Does the printing change if we use indent? I suppose not; but could it, should it?

```
RingHom(RingWithID(3, "QQ[x,y]") ->  
  RingWithID(3, "QQ[x,y]") sending  
  [x,y] to [x^2, y^3] )
```

#8 - 19 Jan 2024 09:36 - Anna Maria Bigatti

- Assignee set to Anna Maria Bigatti

John Abbott wrote:

Does the printing change if we use indent? I suppose not; but could it, should it?

It is printed by CoCoALib RingHomBase::myOutputSelf, so CoCoA-5 indent should have no effect on it.

#9 - 19 Jan 2024 15:02 - Anna Maria Bigatti

Done:

```
RingHom(RingWithID(3, "QQ[x,y]") -> RingWithID(3, "QQ[x,y]") sending [x, y] to [x^2, y^3])
```

(and also done some cleaning in old commented out code)

#10 - 19 Jan 2024 15:02 - Anna Maria Bigatti

- Status changed from In Progress to Feedback

#11 - 19 Jan 2024 16:26 - Anna Maria Bigatti

Tested also for DenseUPolyRing (and made example for DUP)

#12 - 19 Jan 2024 16:50 - Anna Maria Bigatti

- % Done changed from 20 to 90