

## CoCoA-5 - Support #225

### HilbertBasis: cocoa vs normaliz

10 Sep 2012 10:40 - Anna Maria Bigatti

<b>Status:</b>	Closed	<b>Start date:</b>	10 Sep 2012
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Anna Maria Bigatti	<b>% Done:</b>	100%
<b>Category:</b>	Manual/documentation	<b>Estimated time:</b>	1.50 hour
<b>Target version:</b>	CoCoA-5.1.0 Easter14	<b>Spent time:</b>	1.50 hour
<b>Description</b>			
In CoCoA HilbertBasis(M) is the HilbertBasis of the kernel of M. In Normaliz is the HilbertBasis of the monoid "generated" by (the rows of) M.  Think about the names, and improve documentation in CoCoA.  <b>2013-04-16</b> AMB changed name of cocoa function to <b>HilbertBasisKer</b>			
<b>Related issues:</b>			
Related to CoCoALib - Feature #227: HilbertBasis from Normaliz: full-lattice ...		<b>New</b>	<b>10 Sep 2012</b>
Related to CoCoA-5 - Design #1194: Rename HilbertBasisKer into LinKerHilbertB...		<b>Rejected</b>	<b>25 Jun 2018</b>
Related to CoCoA-5 - Support #1478: HilbertBasis: clarify		<b>Closed</b>	<b>06 Aug 2020</b>
Related to CoCoA-5 - Feature #1596: Add CoCoA5 function NmzHilbertBasisKer		<b>Resolved</b>	<b>14 May 2021</b>

### History

#### #1 - 16 Apr 2013 18:49 - Anna Maria Bigatti

- Status changed from New to Feedback
- % Done changed from 0 to 90

#### #2 - 05 Dec 2013 18:17 - John Abbott

In an email exchange around 2013-04-17 we discussed names of the fns.

Currently [2013-12-05] they are called **HilbertBasisKer** and **NmzHilbertBasis**.

Is this choice a conscious decision? Or was it simple what happened (without thinking)?

In the emails other suggestions are:

**HilbertBasisPositiveKer(M)** perhaps too long?

**NmzHilbertBasisRows** (approved by Bruns) and should there then be a **Cols** version too?

This has been in feedback for months; can we make an explicit decision, and close?

#### #3 - 02 Apr 2014 17:33 - Anna Maria Bigatti

- Target version set to CoCoA-5.1.0 Easter14

#### #4 - 14 May 2014 16:36 - John Abbott

- Target version changed from CoCoA-5.1.0 Easter14 to CoCoA-5.1.1 Seoul14

#### #5 - 20 May 2014 17:54 - Anna Maria Bigatti

- Status changed from Feedback to Closed
- Target version changed from CoCoA-5.1.1 Seoul14 to CoCoA-5.1.0 Easter14
- % Done changed from 90 to 100
- Estimated time set to 1.50 h

**#6 - 25 Jun 2018 11:27 - Anna Maria Bigatti**

- Related to Design #1194: Rename HilbertBasisKer into LinKerHilbertBasis? added

**#7 - 06 Aug 2020 16:34 - John Abbott**

- Related to Support #1478: HilbertBasis: clarify added

**#8 - 14 May 2021 16:50 - Anna Maria Bigatti**

- Related to Feature #1596: Add CoCoA5 function NmzHilbertBasisKer added