CoCoALib - Feature #840

GINV: alex basis

20 Jan 2016 17:56 - John Abbott

Status:	In Progress	**Start date:**	20 Jan 2016
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	10%
Category:	New Function	**Estimated time:**	0.00 hour
Target version:	CoCoALib-1.0	**Spent time:**	1.60 hour

Description

Let some fns form GINV be callable from CoCoALib; in ptic "alex" basis.

History

#1 - 20 Jan 2016 17:59 - John Abbott

Mario has already done a quick comparison between his impl of Janet basis and that in GINV (by Gerdt and Blinkov) - GINV was much faster (sometimes even 100 times faster).

It is not clear where a recent source of GINV can be found; we will ask Gerdt directly.

It is not clear at what level fns inside GINV can be called. Is it usable as a library? (mem mgt???) Perhaps remote provcedure calls have to be effected via the human UI (create a file; make GINV run the file; get GINV answer in another file)

We hope to have a Skype meeting with Gerdt in the near future.

#2 - 20 Jan 2016 18:01 - John Abbott

We shall also need a data structure in CoCoALib to represent the alex basis (or alex-GB basis). What should this structure contain?

Mario also suggested having "remote objects" which are kept inside a GINV session; and GIMV does almost all the computation.

#3 - 19 Feb 2016 14:27 - John Abbott

This morning we had a Skype call: John + Mario + Werner + Vladimir Gerdt.

The main outcomes are:

- Daniel Robertz has already made a Maple-GINV interface, so try asking him
- Vladimir is willing to translate emailed technical questions (from us to Blinkov), and to translate the replies (and send them by email)
- the "old" version on the GINV website is still the current version (no alex code yet)

#4 - 31 Mar 2016 13:05 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

Mario has downloaded the GINV source, but has had several problems with compilation -- he has not yet succeeded in compiling it all.

We hope to look at the code together with the aim of making minimal changes so that it will compile (without warnings).