### CoCoALib - Feature #147

Feature # 143 (In Progress): Buchberger-Moeller (parent task)

### Buchberger-Moeller: impl via modular reduction

01 May 2012 11:44 - John Abbott

Status: In Progress Start date: 01 May 2012

Priority: Urgent Due date:

Assignee: John Abbott % Done: 20%

Category:New FunctionEstimated time:25.00 hoursTarget version:CoCoALib-1.0Spent time:5.60 hours

### **Description**

Impl the idea presented in AKR "Zero-dim Schemes" which uses modular reduction to get the form of the answer quickly then verifies good reduction afterwards.

### Related issues:

Related to CoCoALib - Bug #349: IdealOfPoints: gens are actually a GBasis

Closed 18 May 2013

Related to CoCoALib - Feature #125: Matrix equation solving; linear system so...

In Progress 05 Apr 2012

#### History

# #1 - 28 Jan 2013 08:10 - Anna Maria Bigatti

- Category set to New Function

#### #2 - 08 Feb 2013 18:02 - John Abbott

- Assignee set to John Abbott
- Priority changed from Normal to Urgent
- Target version set to CoCoALib-0.9953

#### #3 - 18 May 2013 11:41 - John Abbott

- Status changed from New to In Progress
- % Done changed from 0 to 20

JAA has a working impl based on the old C4 code. Wasted quite a lot of time tracking down a subtle bug in the old code (which was harmless in C4). This cheap hack does **not** impl the idea in the 0-dim scheme paper.

#### #4 - 29 May 2013 17:04 - John Abbott

- Target version changed from CoCoALib-0.9953 to CoCoALib-0.99534 Seoul14

No chance of finishing this in time for CoCoALib-0.9953/CoCoA School 2013.

### #5 - 29 Oct 2013 15:17 - Anna Maria Bigatti

- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-0.99532

### #6 - 03 Apr 2014 11:29 - John Abbott

- Target version changed from CoCoALib-0.99532 to CoCoALib-0.99533 Easter14

# #7 - 04 Apr 2014 17:45 - John Abbott

- Target version changed from CoCoALib-0.99533 Easter14 to CoCoALib-0.99534 Seoul14

#### #8 - 10 Jul 2014 14:18 - John Abbott

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- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-1.0

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