# CoCoA-5 - Feature #1476

## Lin alg with polys

06 Aug 2020 14:59 - John Abbott

Status:	New	Start date:	06 Aug 2020
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	CoCoA-5 function: new	Estimated time:	0.00 hour
Target version:	CoCoA-5.4.2	Spent time:	0.20 hour

### Description

Andraschko requests...

Given two subsets B1 and B2 of a polynomial ring, it is often necessary to construct  $U = \langle B1 \rangle_K$  and  $V = \langle B2 \rangle_K$  (the K-vector subspaces generated by B1 and B2) and then compute a basis of their direct sum or intersection. Is there an easy way for doing this or do I have to implement everything by myself?

#### History

### #1 - 06 Aug 2020 15:03 - John Abbott

I plan to meet Bernhard on Monday, and hope to learn better exactly what he wants.

Anyway, for some time I have though that "doing linear algebra with polynomials" would be a good idea.