

CoCoALib - Feature #682

PPMonoid: add fn to check for overflow in products

14 Apr 2015 11:18 - John Abbott

Status:	New	Start date:	14 Apr 2015
Priority:	Low	Due date:	
Assignee:		% Done:	0%
Category:	Safety	Estimated time:	3.00 hours
Target version:	CoCoALib-1.0	Spent time:	0.50 hour
<b>Description</b> <p>I have recently added the fn PowerOverflowCheck for PPs; implemented via mem fn myPowerOverflowCheck. Currently this is called (as a heuristic) only when computing powers of sparse polynomials.</p> <p>Consider adding a similar overflow check for products of PPs; then we could add a heuristic check (on LPPs) when multiplying sparse polys. This would avoid an anomalous situation for certain values of n: namely <math>x^{(2*n)}</math> gives exponent overflow, but <math>(x^n)*(x^n)</math> currently gives no error.</p>			

History

#1 - 14 Apr 2015 11:23 - John Abbott

- Priority changed from Normal to Low
- Estimated time set to 3.00 h

Perhaps we will need two overflow check fns:

- myMulOverflowCheck
- myMulByIndetPowerOverflowCheck

It would be convenient to have non mem fns too: I suggest these names

- MulOverflowCheck
- MulByIndetPowerOverflowCheck