

CoCoALib - Feature #585

(Hilbert-) quasi-polynomials

10 Jul 2014 13:41 - Christof Soeger

Status:	Closed	Start date:	10 Jul 2014
Priority:	Normal	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	New Function	Estimated time:	2.70 hours
Target version:	CoCoALib-0.99534 Seoul14	Spent time:	2.60 hours
Description			
<p>For objects (cones, algebras,..) which are not generated in degree 1 the Hilbert function is not a polynomial anymore, but a quasi-polynomial.</p> <p>A quasi-polynomial Q of period p is a polynomial with periodic coefficients, in other word, a collection of polynomials $Q_0, \dots, Q_{\{p-1\}}$ with $Q(i) = Q_j(i)$ when i is congruent $j \pmod{p}$.</p> <p>How to represent them? (in CoCoALib and also CoCoA5)</p> <p>Easy possibility: A vector of regular polynomials. It can be combined with an evaluation function that chooses the right Q_i.</p>			

History

#1 - 14 Jul 2014 14:03 - John Abbott

- Category set to New Function
- Status changed from New to Feedback
- Assignee set to John Abbott
- Target version set to CoCoALib-0.99534 Seoul14
- % Done changed from 0 to 90
- Estimated time set to 2.70 h

Implemented; tested; documented; checked in. So status-->FEEDBACK!

#2 - 29 Jul 2014 11:18 - John Abbott

- Status changed from Feedback to Closed
- % Done changed from 90 to 100

Christof has reported no problems, so closing.