CoCoALib - Slug #1369

RandomUnimodularMat is slow with many iters

25 Nov 2019 13:45 - John Abbott

Description				
RandomUnimodularMat becomes too slow when number of iters is high.				
Try a divide-and-conquer approach.				
Related issues:				
Oct 2016				
0				

History

#1 - 25 Nov 2019 13:46 - John Abbott

- Related to Feature #955: RandomUnimodularMat - random unimodular matrix (of integers) added

#2 - 25 Nov 2019 13:48 - John Abbott

RandomUnimodularMat(QQ,4,1000000) takes too long. It is faster to do product([RandomUnimodularMat(QQ,4,10000) | j in 1..100])

Divide-and-conquer makes sense; not sure when it should switch over to simple linear approach.

#3 - 25 Nov 2019 20:33 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

First impl is quite disappointing; the overhead/cost of matrix mult is embarrassingly high. Should do recursion based on the internal vector< vector<BigInt> > structure then convert to matrix only at the end. Not tonight, Josephine!

#4 - 09 Jan 2020 12:19 - John Abbott

- Target version changed from CoCoALib-0.99700 to CoCoALib-1.0