FLINT 2.3

William Hart   Fredrik Johansson   Sebastian Pancratz,
Andy Novocin   (David Harvey)

December 16, 2011

iFLINT 2.3

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Introduction to FLINT

Fast Library for Number Theory

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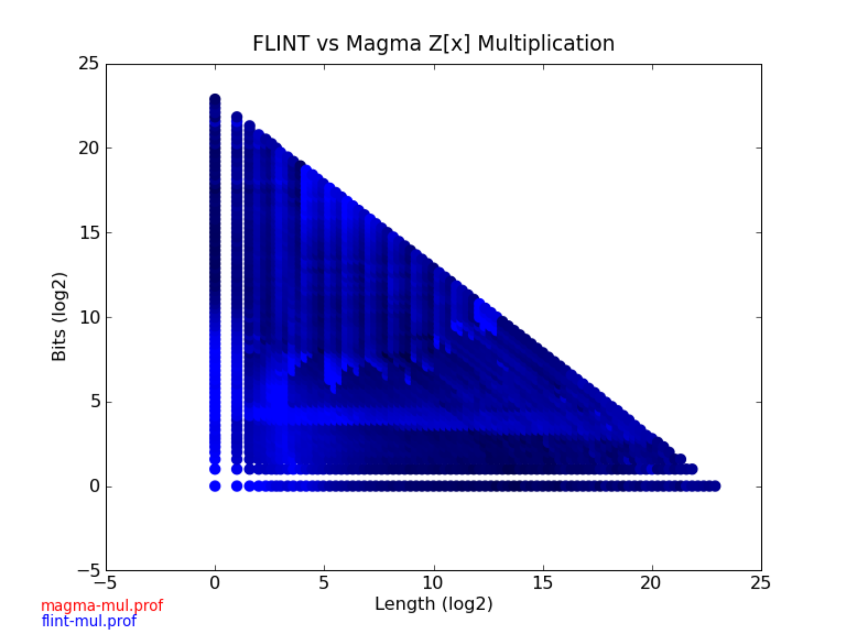
- Arithmetic functions


FLINT vs Magma Z[x] Multiplication
Bits (log2)
Length (log2)
25
20
15
10
5
0
−5
−5
0
5
10
15
20
25
magma-mul.prof
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- Polynomials over $\mathbb{Z}/n\mathbb{Z}$ for multiprecision n

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FLINT 2 future

- Implement Hensel lifting, subquadratic LLL and van Hoeij/Novocin factoring of polynomials over $\mathbb{Z}$

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- Optional BLAS for matrices over $\mathbb{Z}/p\mathbb{Z}$

Website

- Website: http://www.flintlib.org/

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- Contributors: Fredrik Johansson, Sebastian Pancratz, David Harvey, Andy Novocin, Jan Tuitman, Daniel Woodhouse, Peter Shrimpton, Richard Howell-Peak, Jason Papadopoulos, Burcin Erocal, Gonzalo Tornaria, Tom Boothby, David Howden, Daniel Scott, Tomasz Lechowski, Daniel Ellam, Didier Deshommes, Michael Abshoff, William Stein, Robert Bradshaw, Carl Witty, Craig Citro, Martin Lee, Timothy Abbot, Jaap Spies, Kiran Kedlaya, Kate Minola, Serge Torres, Ralf Hemmecke, (Martin Albrecht, Hanhong Xue, Paul Zimmermann, Damien Stehlé)