Libpll full tree CLV update benchmarks

April 12, 2017

1 Benchmark

CPU architecture (computer: my hits computer), 500 iterations

	seq59	seq128	seq404
tipinner benoit	1037ms	7241ms	2288ms
repeats benoit	817ms	4997ms	1838ms

CPU architecture (computer: my hits computer), 500 iterations

	seq59	seq128	seq404
tip pattern mode	4137ms	51123ms	64269ms
repeats no update 2000000	3581ms	30411ms	24186ms
repeats 2000000	3961ms	34712ms	29315ms
repeats nopersite 2000000			

AVX architecture (computer: my hits computer), 500 iterations

	seq59	seq128	seq404
tip pattern mode	1564ms	$21656 \mathrm{ms}$	24493ms
repeats no update 2000000	488ms	4886ms	4068ms
repeats 2000000	911ms	9235 ms	8902ms
repeats nopersite 2000000	$653 \mathrm{ms}$	6114ms	$5176 \mathrm{ms}$

CPU architecture (computer: avx), 500 iterations

	seq59	seq128	seq 404
tip pattern mode	5642ms	72772ms	92708ms
repeats no update 2000000	1747ms	$15508 \mathrm{ms}$	$12372 \mathrm{ms}$
repeats 2000000	$2305 \mathrm{ms}$	21764ms	19153ms
repeats + bclv 2000000	2015ms	19541ms	16916ms
repeats + bclv2 2000000	2155ms	20877ms	18511ms

AVX architecture (computer: avx), 500 iterations

	seq59	seq128	seq404
tip pattern mode	2131ms	29971ms	33231ms
repeats no update 2000000	$660 \mathrm{ms}$	$6649 \mathrm{ms}$	5174ms
repeats 2000000	1239ms	12731ms	11953ms
repeats + bclv 2000000	1146ms	12071ms	11244ms
repeats + bclv2 2000000	1217ms	$13285 \mathrm{ms}$	12015ms

CPU architecture (computer: play), 500 iterations

	seq59	seq128	seq404
tip pattern mode	$15546 \mathrm{ms}$	212398ms	285752 ms
repeats no update 2000000	$4593 \mathrm{ms}$	39958 ms	$30911 \mathrm{ms}$
repeats 2000000	5741ms	$60693 \mathrm{ms}$	$50494 \mathrm{ms}$
repeats + bclv 2000000	5412ms	54222ms	$48397 \mathrm{ms}$
repeats + bclv2 2000000	5484ms	$57526 \mathrm{ms}$	$50360 \mathrm{ms}$

AVX architecture (computer: play), 500 iterations

	seq59	seq128	seq404
tip pattern mode	17107ms	$226069 \mathrm{ms}$	287151ms
repeats no update 2000000	4781ms	$40610 \mathrm{ms}$	33130ms
repeats 2000000	$6013 \mathrm{ms}$	60118ms	48222ms
repeats + bclv 2000000	$5434 \mathrm{ms}$	$58475 \mathrm{ms}$	51413ms
repeats + bclv2 2000000	6169ms	55909ms	49226ms