C++ Simple tempo

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Run 5	Média	MFLOPS
600	0,189	0,187	0,19	0,187	0,188	0,188	2297872340
1000	1,14	1,324	1,117	1,125	1,099	1,161	1722652885
1400	3,464	3,614	3,428	3,546	3,578	3,526	1556437890
1800	18,418	18,439	17,827	18,344	18,746	18,355	635467175
2200	38,904	38,962	38,506	38,768	39,021	38,832	548413679
2600	69,497	69,66	69,592	69,323	70,35	69,684	504448654
3000	115,561	117,591	118,919	115,976	117,304	117,07	461262493

C++ Simple L1 Cache Miss

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Run 5	Média
600	244761931	244765347	244734523	244778929	244759532	244760052
1000	1216744963	1240369707	1229628175	1229655865	1228045423	1228888827
1400	3416178655	3499195844	3497365616	3497957035	3504379811	3483015392
1800	9084817800	9079503826	9091670014	9091742410	9089353356	9087417481
2200	17631262613	17651813541	17617731351	17617714452	17628014773	17629307346
2600	30884103395	30873897239	30875520610	30875415334	30878576489	30877502613
3000	50302116766	50302584020	50302262206	50301462989	50293661292	50300417455

C++ Simple L2 Cache Miss

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Run 5	Média
600	39595351	38716208	38200349	39307020	38637345	38891255
1000	259320256	286893295	219930005	315814822	269023445	270196365
1400	3416178655	1699862646	904729276	1438679242	1329480618	1757786087
1800	7949118273	8354690659	4921427076	7782310704	9204037733	7642316889
2200	23649985310	22262694090	18914305940	23406062614	23223387157	22291287022
2600	52150262449	50714683359	48304466163	51305633567	52011221788	50897253465
3000	95504141206	97925165475	100024541022	95227058742	95698754374	96875932164

Java Simple

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Média	MFLOPS
600	0,206	0,309	0,26	0,309	0,271	1594095941
1000	1,358	1,367	1,484	1,955	1,541	1297858533
1400	4,465	5,395	5,025	5,421	5,077	1080953319
1800	19,05	20,118	19,758	20,126	19,763	590193796
2200	40,406	40,745	41,058	31,585	38,449	553876564
2600	72,6	71,609	72,673	72,12	72,251	486526138
3000	119,843	120,353	117,81	121,248	119,814	450698583

C++ Line (small) tempo

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Média	MFLOPS
600	0,101	0,104	0,101	0,104	0,102	0,103	0,103	4194174757
1000	0,49	0,518	0,497	0,498	0,491	0,493	0,498	4016064257
1400	1,591	1,594	1,591	1,606	1,587	1,584	1,592	3447236181
1800	3,465	3,441	3,442	3,473	3,44	3,422	3,447	3383812010
2200	6,386	6,343	6,319	6,395	6,345	6,309	6,35	3353700787
2600	10,619	10,54	10,519	10,626	10,534	10,507	10,558	3329418450
3000	16,317	16,225	16,189	16,315	16,21	16,167	16,237	3325737513

C++ Line (small) L1 Cache Misses

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Média
600	27111830	27111363	27107431	27108515	27110005	27113256	27110400
1000	125767918	125769656	125743309	125748744	125766172	125760967	125759461
1400	346263971	346252824	346158986	346166227	346257806	346257182	346226166
1800	746231737	746267620	745995228	745973900	746266818	746267145	746167075
2200	2076132418	2075443665	2075710794	2075788463	2075623972	2075614980	2075719049
2600	4413285463	4413207942	4413088168	4413230508	4413176658	4413225958	4413202450
3000	6780663201	6780900660	6780620654	6780520367	6780634754	6780892632	6780705378

C++ Line (small) L2 Cache Misses

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Média
600	57093809	57500945	58316107	56894469	57563429	57544143	57485484
1000	261725259	262214487	266701384	261527857	263889851	264324458	263397216
1400	703369439	698697176	711076312	703449332	699147222	698694615	702405683
1800	1449564552	1434547289	1460346288	1459291467	1435507356	1437055952	1446052151
2200	2589223943	2548834068	2597033954	2603587392	2548755164	2546766413	2572366822
2600	4231110303	4160028905	4235888510	4262874697	4175724139	4158842178	4204078122
3000	6432883789	6331263022	6458967048	6504739389	6455915115	6348062099	6421971744

C++Line (big) tempo

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Média	MFLOPS
4096	41,506	41,654	41,184	41,357	41,425	3317777996
6144	139,858	139,696	138,384	138,966	139,226	3331679916
8192	332,644	330,956	329,171	330,511	330,821	3323584742
10240	650,421	644,744	645,578	648,073	647,204	3318093905

C++Line (big) L1 Cache Misses

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Média
4096	17545395595	17545334030	17543268113	17533407170	17541851227
6144	59191216413	59160936377	59159728409	59112110025	59155997806
8192	140215637602	139997653383	140110845690	140133275898	140114353143
10240	273778746358	273577162886	273664108020	273601112339	273655282401

C++Line (big) L2 Cache Misses

Matrix Dimension	Run 1	Run 2	Run 3	Run 4	Média
4096	16297375657	16476987926	16385284609	15973158844	16283201759
6144	54809919061	54649825088	54990853222	53556195553	54501698231
8192	130700407718	127224195707	130512816586	131332280258	129942425067
10240	255792764467	257479869401	258608725852	258584436560	257616449070

z

Java Line

Matrix Dimension	Run 1	Run 2	Run 3	Média	MFLOPS
600	0,137	0,139	0,144	0,14	3085714286
1000	0,619	0,712	0,62	0,65	3076923077
1400	2,738	1,869	2,712	2,44	2249180328
1800	5,944	6,423	5,782	6,05	1927933884
2200	15,12	11,595	10,628	12,448	1710796915
2600	19,48	19,083	17,898	18,82	1867800213
3000	29,377	27,869	28,096	28,447	1898266953

C++ Block tempo

Matrix Dimension	Block Size	Run 1	Run 2	Média	MFLOPS
4096	128	31,276	31,059	31,168	4409617347
	256	27,363	29,889	28,626	4801193093
	512	36,664	36,67	36,667	3748301019
6144	128	105,711	105,201	105,456	4398578250
	256	92,144	92,872	92,508	5014230855
	512	90,41	94,765	92,588	5009898345
8192	128	248,636	249,358	248,997	4415762550
	256	401,746	395,523	398,635	2758191398
	512	331.037	329,096	329,096	3341005748
10240	128	488,174	488,685	488,43	4396707098
	256	428,25	429,224	428,737	5008860089
	512	440,542	443,901	442,222	4856121242

C++ Block L1 Cache Misses

Matrix Dimension	Block Size	Run 1	Run 2	Média
4096	128	9775778301	9753484014	9764631158
	256	9100611572	9091873458	9096242515
	512	8775599108	8786563878	8781081493
6144	128	32986071249	32920421537	32953246393
	256	30711108090	30669862241	30690485166
	512	29648298305	29636647613	29642472959
8192	128	78192608624	78041991890	78117300257
	256	73055081492	73033428905	73044255199
	512	70403341513	70355778416	70379559965
10240	128	152705170561	152418242978	152561706770
	256	142167761399	141985697202	142076729301
	512	137114803992	137082975273	137098889633

C++ Block L2 Cache Misses

Matrix Dimension	Block Size	Run 1	Run 2	Média
4096	128	33160406925	32641271698	32900839312
	256	23328686209	22841292780	23084989495
	512	18875836309	19222820557	19049328433
6144	128	112111147292	110258857812	111185002552
	256	78544656481	77379099946	77961878214
	512	66310643807	65907615266	66109129537
8192	128	265182331268	260702606891	262942469080
	256	158699875960	152981442215	155840659088
	512	131234752806	131039098148	131136925477
10240	128	519047332257	510143573385	514595452821
	256	363073542837	358396979427	360735261132
	512	307820970194	304246984952	306033977573

Parallel (1st Method)

Matrx Dimension	Time	MFLOPS	Speedup	Efficiency
4096	7,51528	18287935176	5,51	0,69
6144	30,0213	15450912118	4,64	0,58
8192	79,7244	13791406743	4,15	0,52
10240	199,254	10777618758	3,25	0,41

Matrix Dimension	Parallel 1st Meth	Parallel 2nd Method
4096		
6144		
8192		
10240		

Parallel (2nd Method)

Matrx Dimension	Time	MFLOPS	Speedup	Efficiency
4096	35,841	3834685234	0,87	0,11
6144	115,444	4018021447	0,83	0,1
8192	289,909	3792609501	0,88	0,11
10240	607,497	3534969964	0,94	0,12