Matrix multiplication

GPU vs CPU (not transposed)

N	t_GPU [ms]	t_CPU [ms]	
128	4.58	14.1	Workgroups 1x1
256	42.5	148.64	
512	345.17	1104.6	
1024	2864.53	39664.86	

GPU vs CPU (transposed)

N	t_GPU [ms]	t_CPU [ms]
512	255.58	283.17
1024	2018.56	2522.37

Influence of Workgroup size

N_workgr	t_GPU [ms]	
1	345.17	not transposed, N = 512
2	307.57	
4	151.47	
8	111.84	
16	636.91	

Exploiting cache locality is crucial!