



**FIGURE C.7.3 SGEMM dense matrix-matrix multiplication performance rates.** The graph shows single precision GFLOPS rates achieved in multiplying square  $N \times N$  matrices (solid lines) and thin  $N \times 64$  and  $64 \times N$  matrices (dashed lines). Adapted from Figure 6 of Volkov and Demmel [2008]. The black lines are a 1.35 GHz GeForce 8800 GTX using Volkov's SGEMM code (now in NVIDIA CUBLAS 2.0) on matrices in GPU memory. The blue lines are a quad-core 2.4 GHz Intel Core2 Quad Q6600, 64-bit Linux, Intel MKL 10.0 on matrices in CPU memory.