Many core and contributed packages (including **spBayes**) call Basic Linear Algebra Subprograms (BLAS) and LAPACK (Linear Algebra PACKage) Fortran libraries.

Substantial computing gains:

- processor specific threaded BLAS/LAPACK implementation (e.g., Intel’s Math Kernel Library or AMD’s Core Math Library (ACML))

- processor specific compilers (e.g., Intel’s *icc/ifort*)
Time needed to collect 100 MCMC samples using \( spLM \) and threaded vs. non-threaded BLAS/LAPACK on an Intel Core 2 Quad processor and Ubuntu 8.10 Linux OS. \( R \) compiled with GNU gcc and gfortran.