Some computing notes

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Computing environment

- Many core and contributed packages (including \texttt{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 \texttt{icc}/\texttt{ifort})

Time needed to collect 100 MCMC samples using \texttt{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.