# Installing SPRINT

# Supercomputers

– SPRINT is already installed on HPC Wales and ARCHER, the national supercomputer.

–ARCHER is the next generation of UK National High Performance Computing Facility.

–http://www.archer.ac.uk/access/

–Usage similar to HPC Wales

- R script remains the same
- Submission script is similar, but specific to the system

# Prerequisites

– SPRINT is already installed on HPC Wales and ARCHER, the national supercomputer.

**Prerequisites for installing on your own computer:**

–Unix/Linux or Mac OSX (sorry, Windows is not supported).

–Install C, mpich and R 2.10 - 3.x.

(An OpenMPI version of SPRINT coming soon)

# Prerequisites on Unix/Linux

- gcc compiler: http://gcc.gnu.org/
- MPICH: http://www.mpich.org/
- R (v2.10 or newer): http://www.r-project.org

Install using yum or rpm. You may need to ask a systems administrator for help.

# Prerequisites on Mac OSX

- Install Xcode with the Command Line Tools option selected.
  - Run 'which gcc' from the command line to check this has worked.
- Install R (v2.10 or newer):
  - http://www.r-project.org

# Prerequisites on Mac OSX -MPICH

- Install MPICH: http://www.mpich.org/

- Check if it's already installed:

  - $ mpicc –v

- Install with homebrew:

  - $ brew install mpich2

- Or install with macports:

  - $ sudo port install mpich2

# R packages

- SPRINT depends on the following R packages and they must be installed before installing SPRINT.

$ R

> install.packages("rlecuyer")

> install.packages("boot")

> install.packages("e1071")

> install.packages("ff")

> install.packages("randomForest")

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–Once pre-requisites are in place, then SPRINT installs like any other R package.

– SPRINT is not available on CRAN at present (until the OpenMPI release is ready).

–Download from r-sprint.org

–Or download from http://www.archer.ac.uk/training/course-material/2014/05/SPRINT_HPCWales/

–$ R CMD install sprint_1.0.5.tar.gz

# How do I install it?

– There are more details in the SPRINT documentation (http://www.r-sprint.org/).

– You may need help from your sys admin

– The SPRINT team are happy to help with any install problems