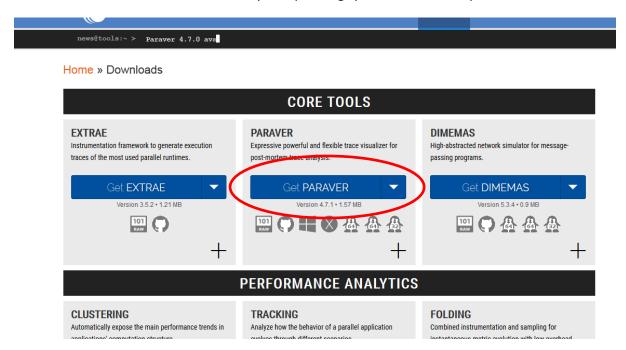
## Hands-on tutorials

## **Paraver**

- 1. To install Paraver, go to https://tools.bsc.es/downloads.
- 2. Click on GetPARAVER and select your operating system from the drop-down menu:



- 3. Extract the downloaded file and run the wxparaver executable (on Windows), the wxparaver app (on Mac OSX) or the wxparaver binary (on Linux, in the /bin directory).
- 4. To access the tutorial, download the following file: <a href="https://tools.bsc.es/sites/default/files/documentation/1.introduction\_to\_paraver\_mpi.tar.gz">https://tools.bsc.es/sites/default/files/documentation/1.introduction\_to\_paraver\_mpi.tar.gz</a>
- 5. On Windows, you can use 7zip to extract the file:
  - If you don't already have it, download it from <a href="http://www.7-zip.org/download.html">http://www.7-zip.org/download.html</a> and install.
  - You will need to run 7zip twice: once to create wxparaver-4.7.2-Linux\_x86\_64.tar and once more to extract the tar file.

On Unix operating systems, the following command can be used:

```
tar -xvzf wxparaver-4.7.2-Linux x86 64.tar.gz
```

6. Once extracted, open index.html or index.pdf.

## Cube

- 1. To install Cube, go to <a href="http://www.scalasca.org/software/cube-4.x/download.html">http://www.scalasca.org/software/cube-4.x/download.html</a>.
- 2. On **Windows** or **Mac OSX**, download the appropriate binary (both are highlighted in red below) and then run it to install Cube.



On **Linux**, you will need to build Cube from source. Download the v4.3.5 source, circled in blue above. Extract it using the command

```
tar -xvzf cube-4.3.5.tar.gz
```

For a basic installation the following commands can be used:

```
./configure --prefix=<install_dir>
make
make install
```

Depending on the setup of your system, there may be some prerequisites to install first. More detailed installation instructions can be found at:

http://apps.fz-juelich.de/scalasca/releases/cube/4.3/docs/INSTALL.txt

and

http://apps.fz-juelich.de/scalasca/releases/cube/4.3/docs/CubeInstall.pdf.

3. Please see the sheet on the NAS Parallel Benchmark for instructions on how to produce a trace file to look at.