

## **“Constructing scientific applications from components”**

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This talk discusses tools for constructing applications by interconnecting components. These kind of tools include a graphical interface that allows the assembly of a program from a set of building-blocks that you drag into a work-space window and connect up using the mouse. The environments are designed to be simple enough for a non-specialist in computer science to use, but complex and powerful enough to be of real use to scientists and engineers. Facilities for data display are also usually included.

An example of these kind of tools is Triana (see <http://www.trianacode.org/>). Some examples of the use of Triana will be given, including one in the area of signal processing. An example of the reutilization of already existent code will also be given.

In the last part of the talk, we will see how these development environments can be used to support the execution of applications in a hardware platform composed of several computers that can be geographically distributed. Again, Triana will be used to illustrate these possibilities.