



AIMS - African Institute for Mathematical Sciences
Muizenberg, South Africa

16-22 July, 2007

VOLUNTEER COMPUTING FOR AFRICA

An intensive one-week workshop will be offered to qualified African students interested in the new technology of "Volunteer Computing". This technology, made famous by projects such as SETI@home, can harness the power of tens of thousands of publicly available personal computers around the world on behalf of deserving scientific projects, which adapt their computing problems to it. It is thus of great interest to institutes and universities in developing countries with insufficient computing resources for their research needs. The specific technology to be taught is called BOINC (see: <http://boinc.berkeley.edu>). BOINC is open source and multi-platform. The workshop language is English.

Teachers are from internationally known institutes such as CERN (Geneva), the Niels Bohr Institute (Copenhagen), and the Swiss Tropical Institute (Basel). The workshop is sponsored by Africa@home, a partnership funded by the Geneva International Academic Network (GIAN).

Outline of the workshop content and objectives

Monday 16 July: Introduction to the general aspects of volunteer computing, relevance to different scientific tasks, and client side of volunteer computing.

Tuesday 17 July: Objective is for participants to familiarise themselves with a number of open source components used to run volunteer computing servers.

Wednesday 18 July: Objective is step by step walk through of building client and server, including typical debugging issues.

Thursday 19 July: Analyse and plan porting of a new project to volunteer computing.

Friday 20 July: Review and test knowledge acquired during workshop, get feedback on suitability of workshop format, discuss next steps for participants.

Sat-Sun 21-22 July: Debriefing with AIMS, planning of future activities with AIMS, SACEMA and other Africa@home partners.

Application forms are available at www.africaathome.org and should be sent to cyber@icvolunteers.org by May 15th.

Applications should include a CV and suitable academic recommendations to assist selection. Students should have programming experience and be familiar with both Linux and Windows environments. Preference will be given to candidates who will be able to return to their home institutes and teach and apply the technology there.

Travel expenses, board and lodging will be paid for all students accepted. Some assistance can be given for visa applications to South Africa for the duration of the workshop. Please allow sufficient time for visa formalities.

