Real-time software engineer/ high-energy physicist

The ISDC is seeking a high-energy physicist/ software engineer for its growing team working on the CTA project (http://www.isdc.unige.ch/cta).

The Cherenkov Telescope Array (CTA) is an international project conducted by many countries worldwide. With its unprecedented energy coverage and sensitivity, it will uncover the Universe in the most extreme window of the electromagnetic spectrum: the very high energy gamma-rays. Such energetic photons are emitted by the annihilation or disintegration of particles and from the acceleration of electrons, positrons and atomic nuclei in the most extreme sources of the Universe.

The successful candidate will be responsible for the design and early implementation of the on-site real-time data acquisition system for the CTA telescopes and will participate in the development of the infrastructure for the CTA data analysis. Some 100 individual telescopes spread over an area of a few square kilometers will generate several TByte of RAW data per observational night. The array construction will start in 2012. When the full array is in operations by 2016 a volume of a few PByte per year will have to be handled and processed.
To be successful in this task, you have strong skills and some experience in real-time software engineering typically in C/C++. You will have to be at ease working in an international environment.

The successful candidate will as well strengthen the System Administration team at the ISDC. This will involve installing, maintaining and troubleshooting some 100 servers (primarily Linux but with some other operating systems) and providing first line support to 50 users. This will include being on call and ready to intervene on-site one week in three to ensure smooth running of the ISDC real-time operational tasks.
The successful candidate will have a passion for and a strong understanding of real-time programming, Linux and ideally system administration experience, including network infrastructure, storage and filesystems, server software, system installation and management tools, and software development.

Candidates should send a motivation letter, a curriculum vitae and the names of two references by e-mail to Marie-Claude.Dunand@unige.ch.
For further information please contact Roland.Walter@unige.ch.

Applications will be accepted until the position is filled.

ISDC, Geneva (Switzerland), 05/2010