

# CHEP04



**Monday, 27 September 2004 - Friday, 1 October 2004**

**Interlaken, Switzerland**

## **Scientific Programme**

## Plenary Sessions

Plenary invited talks.

## Track 1 - Online Computing

CPU farms for high-level triggering; farm configuration and run control; describing and managing configuration data and conditions databases; online software frameworks and tools. We propose to exclude first-level trigger systems, readout systems and detector controls since these topics are highly specialized and are already well covered by other conferences.

## Track 2 - Event processing

event simulation and reconstruction; physics analysis; event visualisation and data presentation; toolkits for simulation and analysis; event data models; detector geometry models; specialized algorithms for high-level triggering and event processing.

## Track 3 - Core Software

domain specific frameworks; persistency; interactivity; foundation and utility libraries; math libraries; component models; object dictionaries; scripting; graphics; use of 3rd party software components (open source and commercial), programming techniques and tools; software testing; configuration management; software build, release and distribution tools; quality assurance; information systems; documentation.

## Track 4 - Distributed Computing Services

studies of data organization and management and related analysis strategies; workflow tools; event access and selection and general data mining techniques; definition, development, deployment and use of grid technologies; performance monitoring and measurements. It features a special session dedicated to security .

## Track 5 - Distributed Computing Systems and Experiences

experience on designing and exploiting end -to-end systems for scientific computing, in particular for the handling, distribution and storage of all types of data (raw, simulated, calibration, etc.); related issues such as event selection and data mining as well as exploitation of the computing centres and fabrics; the development of the distributed computing models of experiments; real experience in prototypes and production systems.

## Track 6 - Computer Fabrics

architectures and technologies; integral systems (cpu/storage) and life-cycle management; functionality and operation of regional centres; global usage and management of resources; support of grid infrastructure and its exploitation, desktop and mobile computing, parallel computing.

## **Track 7 - Wide Area Networking**

global network status and outlook; advanced technologies and their use in applications; HENP networks and their relation to future grid systems; the digital divide and issues of access, readiness and cost; collaborative systems, progress in technologies and applications.