

Introduction

Computing in High Energy Physics (CHEP) is a major series of international conferences for physicists and computing professionals from the High Energy and Nuclear Physics community, Computer Science, and Information Technology. The CHEP conference provides an international forum to exchange information on computing experience and needs for the community, and to review recent, ongoing and future activities. Recent conferences were held in Mumbai in 2006, Interlaken in 2004, [San Diego](#) in 2003, [Beijing](#) in 2001 and [Padova](#) in 2000.

CHEP'07 is organised by TRIUMF and the University of Victoria. The Conference Chairs are Randall Sobie and Reda Tafirout. There is an International Advisory Committee setting the overall themes of the conference, a Local Organising Committee responsible for the conference infrastructure and a Programme Committee responsible for the content. Details of these can be found at the [web site](http://www.chep2007.com) (URL <http://www.chep2007.com>).

Conference – Monday 3rd September 2007 to Friday 7th September 2007.

Registration – Sunday 2nd September 2007, beginning at 15:00 until 20:00. Registration will also be possible on Monday morning and each subsequent morning for delegates who arrive later in the week.

WLCG Meeting – Saturday 1st September and Sunday 2nd September.

Location

The Conference will take place at the **Victoria Conference Centre** and is situated just off of Victoria Inner Harbour. The Conference Centre is adjacent to the Empress Hotel, which is offering conference pricing on their rooms.

The registration fee has not yet been fixed, but it will include the conference fee and also the Welcome Reception on the Sunday evening, a Conference Dinner and three lunches during those days when we hold afternoon sessions. The fee will be announced in the Second Bulletin.

Travel and Hotels

Victoria, located on Vancouver Island on the west coast of Canada, can be easily reached by air, or by ferry from the mainland of British Columbia. Many flights connect through Vancouver, but be sure to continue your journey to Victoria. More information about travel can be obtained from the website.

Rooms at the Empress Hotel and the Hotel Grand Pacific have been reserved for delegates to CHEP'07. There are plenty of other quality hotels within walking distance, but the local

organizers have arranged a special rate at those hotels for the conference delegates. The conference rates will be available for some days before and some days after the conference for those who wish to prolong their stay in the area.

Conference Programme

The scientific programme of CHEP'07 will consist of a plenary session of invited oral presentations, a number of parallel sessions comprising oral and poster presentations, and an industrial exhibition. The plenary session will occupy the five mornings of the conference and the parallel sessions will be held on 3 afternoons. Contributions will be solicited in the form of abstracts and the Programme Committee, with the help of the International Advisory Committee, will use these to finalise the programme.

The theme of the conference will focus on the processing of HEP data at all stages, from the high level triggers that run on farms of CPUs situated close to the experiment through to the final analysis that use resources distributed worldwide. We expect to draw on the experience from running experiments and also to review the status of new studies of the distributed computing models being made in preparation of the LHC experimental programme. A number of experts from the computing industry will be invited to give an insight into future technology trends for the underlying computer fabrics, networks and software components.

The list of topics to be covered is as follows:

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; online calibration procedures.

Event processing – Event simulation and reconstruction; Physics analysis; Event visualization and data presentation; Toolkits for simulation and analysis; Event data models; Specialized algorithms for event processing

Software components, tools and databases – Programming techniques and tools; Software testing; Configuration management; Software build, release and distribution tools; Quality assurance; Documentation; Foundation and utility libraries; Mathematical libraries; Detector geometry models; component models; Object dictionaries; Scripting; Graphics.

Computer facilities, production grids and networking – Grid operations, monitoring and user support; management and operation of grid-wide services; Experience with operational grids; Technology evolution; Global network status and outlook; Networks and their relation to grid systems; The digital divide and issues of access, readiness and cost.

Grid middleware and tools – Grid software and monitoring tools; Global usage and management of resources; Grid technology and its exploitation in distributed computing models; Grid middleware interoperability; Grid middleware reliability; Data challenges; Evolution and perspective of Grid middleware; Experiment specific middleware applications.

Distributed data analysis and information management – Development of the distributed computing models of experiments; Real experience in prototypes and production systems; Interactive analysis over wide area network; Mobile computing; Tools for supporting distributed analysis; Remote access to and control of data acquisition systems and experiment facilities.

Collaborative initiatives with other sciences – Areas of mutual collaboration in computing between HEP and other disciplines; Shared computing facilities and grids.

Collaborative tools – Collaborative systems, progress in technologies and applications; Advanced videoconferencing systems; Experience in the usage of vide-conferencing tools.

Social Activities

The first get together will be on the Sunday evening when we will hold a Welcome Reception at the Conference Centre alongside the conference registration. Entry to this will be included with the conference registration fee, as will admittance for the mid-week Conference Banquet to be held on Wednesday 4th September. Extra tickets will be available for purchase for the Banquet for accompanying partners.

On the Tuesday afternoon, sessions will not be held. Delegates may choose to go on an organized whale watching tour, or visit the Butchart Gardens. Full details of these will appear in the next Bulletin and on the web site in due course.

Partner Programme

Victoria is one of Canada's most renowned holiday destinations and we expect many of our delegates to be accompanied by their partners and families. A city tour or something similar will be organised. Details should appear in the next Bulletin and on the website.

Timetable

Second Bulletin – January 2007 – Call for Contributions, Conference Registration, Hotel Reservations

Third Bulletin – March 2007 – Conference Programme news

Final date for contributions – 1st April 2007

Fourth Bulletin – May 2007 – Conference Programme

End of Early Registrations – 1st June 2007

Further Information

Conference Secretariat:

TRIUMF
4004 Wesbrook Mall
Vancouver, BC V6T 2A3
Telephone: 1-604- 222-7352
Fax: 1-604-222-1074
E-mail: chep07@triumf.ca
Web site: www.chep2007.com

In addition, we are creating a mailing list for dispatching further information, including the Second and subsequent Bulletins. If you wish to register to receive such information, please go to the URL <http://www.chep2007.com/news/chepinterest.html> and register your interest. [Subscription will generate a short mail exchange to verify that only genuinely interested people register and not anonymous web scanners.]