ACAT 2014
16th International workshop on Advanced Computing and Analysis Techniques in physics research

bulletin 1 January 2014

16th International workshop on Advanced Computing and Analysis Techniques in physics research (ACAT)

INTRODUCTION

The ACAT workshop series, formerly known as AIHENP (Artificial Intelligence in High Energy and Nuclear Physics), was created back in 1990. Its main purpose is to gather three different communities: experimental and theoretical researchers as well as computer scientists to critically analyze past achievements and to propose new or advanced techniques to building better computing tools to boost scientific research, in particular in physics.

In the past, it has established bridges between physics and computer science research, facilitating advances in our understanding of the Universe at its smallest and largest scales. With the Large Hadron Collider, FAIR, eRHIC, EIC, the future International Linear Collider and the many astronomy and astrophysics experiments collecting larger and larger amounts of data, deep communication and cooperation are needed now more than ever.

The 16th edition of ACAT will explore the boundaries of computing system architectures, data analysis algorithmics, automatic calculations as well as theoretical calculation technologies. It will create a forum for confronting and exchanging ideas among these fields and will explore and promote new approaches in computing technologies for scientific research.

Although mainly focusing on high-energy physics, talks related to nuclear physics, astrophysics, laser and condensed matter physics, earth physics, biophysics, and others, are most welcome.

ACAT’14 is co-organized by

- Charles University in Prague, Faculty of Mathematics and Physics
- Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering
- Institute of Physics, Academy of Sciences of the Czech Republic
- Nuclear Physics Institute, Academy of Sciences of the Czech Republic

Further bulletins will provide information about the conference program along with preliminary registration and hotel accommodation information.
DATES AND VENUE

Conference dates
Monday 1 September to Friday 5 September 2014

Conference web site
www.particle.cz/acat2014

Online registration will start in
1 April 2014

VENUE
The conference will take place at the Faculty of Civil Engineering, Czech Technical University in Prague (Thakurova 7/2077, Prague – Dejvice), Czech Republic. Faculty of Civil engineering is a modern building with big and medium conference rooms.

PROCEEDINGS
The proceedings of the conference will be published by IOP with open access.

HISTORY
The ACAT workshop series, formerly AIHENP (Artificial Intelligence in High Energy and Nuclear Physics), was created back in 1990. ACAT conferences are held at roughly 18 month intervals, alternating between Europe, Asia, North America and other parts of the world. Recent ACAT conferences have held in Beijing, China (2013); Uxbridge, UK (2011); Jaipur, India (2010); Erice, Sicily (2008); NIKHEF, Nederland (2007); DESY, Germany (2005); KEK, Japan (2003); Moscow, Russia (2002); Fermilab, USA (2000); Heraklion, Crete (1999); Lausanne (EPFL-UNIL) (1996); Pisa, Italy (1995); Oberammergau, Germany (1993); La Londe Les Maures, France (1992); Lyon, France (1990).

ORGANIZATION
The International Advisory and Coordination Committee (IACC) sets the overall workshop themes. The Local Organizing Committee (LOC) is responsible for the conference infrastructure and the Scientific Program Committee (SPC) is in charge of the scientific content.

Details of these can be found at conference the web site (http://www.particle.cz/acat2014)

TRAVEL AND ACCOMMODATION
Prague is well connected to all major cities in the world. The International and domestic airport of Prague – Vaclav Havel Airport Prague - is located 7 Km from the conference venue. To get from the airport to the conference venue (or to the hotel) you can take a taxi, the airport express bus or use the well-organized public transportation system.

Details on accommodation will be given in the next bulletin. Arrangements are being made with hotels close to the conference venue and in the Prague centre. We are negotiating special rates for the conference delegates. Participants can often find even better offers via web hotel portals.
ACAT'14 will have plenary and parallel sessions during the week-long conference. The parallel sessions will be based on contributions submitted by the participants and will cover the following areas:

- Computing Technology for Physics Research
- Data Analysis - Algorithms and Tools
- Computations in Theoretical Physics: Techniques and Methods

Although mainly focusing on high-energy physics, talks related to nuclear physics, astrophysics, laser and condensed matter physics, earth physics, biophysics, and others, are most welcome.

SOCIAL PROGRAMME

A welcome reception will take place at the Faculty of Civil Engineering on Monday 1 September 2014. On Thursday 4 September 2014 we will have a conference dinner. Entry to both will be included in the conference registration fee. Extra dinner tickets will be available for purchase for accompanying persons.

On the Wednesday afternoon, delegates will be offered a selection of tours including a guided tour through Prague. Full details will appear in the next Bulletin.

TIMETABLE

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<td>Second Bulletin</td>
<td>March 2014</td>
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<tr>
<td>Abstracts submission deadline</td>
<td>30 May 2014</td>
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<td>Contribution acceptance announced</td>
<td>25 June 2014</td>
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<td>Early registration by</td>
<td>1 July 2014</td>
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<td>Off-site registration by</td>
<td>15 August 2014</td>
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<td>On-site registration</td>
<td>1-5 September 2014</td>
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<td>Paper submission by</td>
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FURTHER INFORMATION

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