ACAT 2014

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

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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.

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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.

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CONFERENCE PROGRAMME

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 PROGRAME

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

Second Bulletin	March 2014 (Call for Contribution, Conference Registration, Hotel Reservations)
Abstracts submission deadline	30 May 2014
Contribution acceptance announced	25 June 2014
Early registration by	1 July 2014
Off-site registration by	15 August 2014
On-site registration	1-5 September 2014
Paper submission by	30 September 2014

FURTHER INFORMATION

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