



## Preface

On 25 September – 29 September, 2017, Montenegro (Budva) hosted the regular JINR 26th Symposium on Nuclear Electronics and Computing - NEC'2017. The symposium has been held since 1963.

For the ninth time the organizers of the Symposium are JINR and CERN. The Symposium attracted more than 120 leading specialists in the field of advanced computing and network technologies, distributed computing as well as GRID and cloud computing and nuclear electronics from 14 countries: Belarus, Moldova, Bulgaria, Great Britain, Germany, Russia, USA, France, Czech Republic, Slovakia, Italy, China, Netherlands, Switzerland.

All previous forums of this series were highly appreciated at their true value by the leading specialists and companies involved.

The scientific program of the symposium covered a wide range of issues and included the following sections: on Detector & Nuclear Electronics; Triggering, Data Acquisition, Control Systems; Distributed Computing. GRID & Cloud Computing; Research Data Infrastructures & Computing for Large Scale Facilities; Computations with Hybrid Systems (CPU, GPU, coprocessors) and the traditional topic of the symposium – information technologies in education.

Particular attention was paid to the implementation of the NICA project. Within the program, 2 plenary and 11 sectional reports were presented on this topic.

Financial support for the conference was provided by the JINR and CERN Directorate. The sponsors and partners of the conference were companies IBS Platformix, Supermicro Computer, NIAGARA, Jet Infosystems, Dell EMC.

The organizers of the NEC symposia traditionally paid a particular attention to young scientists and specialists. The NEC conference attracted an impressive number of such attendees which reached 35% of the total number of participants. Within the scope of the symposium the 2nd International School on Heterogeneous Computing Infrastructure was organized. 32 students and young scientists from the leading universities of Russia (MEPhI, St. Petersburg State University, Dubna State University, Ryazan State Radio Engineering University, Magnitogorsk State Technical University, Peoples' Friendship University of Russia, Tomsk Polytechnic University) attended the School. The JINR Laboratory of Information Technologies (<http://www.jinr.ru>), the Laboratory of Big Data Technologies for Mega-science Experiments of NRC "Kurchatov Institute" (<http://bigdatalab.nrcki.ru>), TPU Institute of Cybernetics (<http://portal.tpu.ru/ic>) provided a full financial and organizational support to the participants of the youth school.

In frames of the symposium, a workshop "BigPanDA Technical Interchange Meeting" was also held.

In total, the conference participants heard 36 plenary, 53 sectional and 10 reports presented at the education section. During the conference the participants were involved in fruitful discussions and arguing about open education systems and online educational resources.

Presentations of the delivered reports, the electronic version of the Book of Abstracts as well as conference photos are available on the official site of the Conference at <http://nec2017.jinr.ru>.

**Chairpersons**

Vladimir Korenkov, JINR

Ian Bird, CERN