

NEC'2019



Preface

On 30 September – 4 October, 2019, Montenegro (Budva) hosted the regular JINR 27th Symposium on Nuclear Electronics and Computing - NEC'2019. The symposium has been held since 1963. The organizers of the Symposium are JINR and CERN.

All previous forums of this series were highly appreciated at their true value by the leading specialists and companies involved. The information technologies make a significant contribution to the automation of the physical experiment. The symposium topics covers the hybrid fields of research at the junction of detector electronics and computer science, and they are significant interest to the scientific community. Thus, NEC'2019 scientific program covered a wide range of issues and included the following sections: Computing for Large Scale Facilities (LHC, FAIR, NICA, SKA, PIC, XFEL, ELI, etc.); Distributed Computing. GRID & Cloud Computing; Research Data Infrastructures; on Detector & Nuclear Electronics; Triggering, Data Acquisition, Control Systems;; Machine Learning Algorithms and Big Data Analytics; Computations with Hybrid Systems (CPU, GPU, coprocessors) and the traditional topic – Innovative IT Education.

The Symposium attracted more than 190 leading specialists in the field of advanced computing and network technologies, distributed computing as well as GRID and cloud computing and nuclear electronics from 13 countries and 30 institutions. In total, 32 sessions were held, the conference participants heard 31 plenary and 109 sectional talks.

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, Intel, RSC Group, Cisco, Dell EMC, ITCost.

The organizers of the NEC symposium traditionally paid a particular attention to young scientists and specialists. Within the scope of the symposium the IT-School "Big Data mining and distributed systems" was organized. 32 students and young scientists from the leading universities of Russia attended the School.

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://nec2019.jinr.ru>.

Co-chairperson

Korenkov V.V.