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I. The first Tier-1 center in Russia was opened in Dubna

The Tier-1 center for the CMS experiment at the Large Hadron Collider was presented on 26 March 2015 in the Laboratory of Information Technologies of the Joint Institute for Nuclear Research. There are only 11 storage plants of that kind in the world; the 12th center is being established in Russia on the basis of the NRC "Kurchatov Institute" and LIT, JINR.

The decision to create a Tier-1 center in Russia for experiments at the Large Hadron Collider on the basis of the NRC "Kurchatov Institute" and the JINR was made in November 2011 at the meeting of the committee on cooperation Russia-CERN (CERN - European Organization for Nuclear Research).

The Work Plan for a Tier-1 center in Russia was approved a year later by the Supervisory Board of the WLCG (a GRID system which was designed at CERN to handle large amounts of data from the Large Hadron Collider - LHC). In subsequent years, the Laboratory of Information Technologies worked to create the Tier-1 center for the CMS experiment at the Large Hadron Collider.

The Compact Muon Solenoid (CMS) experiment is one of two large general-purpose particle physics detectors built on the Large Hadron Collider (LHC) at CERN. The goal of the CMS experiment is to investigate a wide range of physics, including the search for the Higgs boson (this discovery of scientists, as we know, was awarded the Nobel Prize), extra dimensions, and particles that could make up dark matter. The Joint Institute for Nuclear Research has been participating in the CMS experiment since its start (since the development of the concept of the experiment).

More information: http://jinr.ru/news_article.asp?n_id=2492&language=eng

II. The NICA project is one of the top mega-science projects in Russia

The session of the Committee of Plenipotentiaries of JINR Member States (18) was held on 25-26 March 2015 in Dubna with participation of representatives of the European Organization for Nuclear Research (CERN), as well as two of the six Associate Members of JINR who join the Institute on the basis of the Agreements signed on the governmental level - Germany and South Africa.

The Joint Institute for Nuclear Research is one of the priorities of the RF Ministry of Education and Science, - said in his speech at the session the representative of the Russian Government in JINR, Deputy RF Minister of Education and Science Alexander Povalko. - The Institute has a glorious history and, of course, excellent prospects. Our goal is to ensure all opportunities for implementation of tasks that the JINR Directorate and JINR scientists set.

Cooperation between the two research institutions - CERN and JINR has been lasting for decades, - said in her commentary Professor Agnieszka Zalewski (Poland), the Chairman of the CERN Council. - It has become a tradition, and the reciprocal granting of the Observer Status by CERN and JINR was its natural development. There is no doubt that the contacts between our institutions will continue to develop, because they are based on scientific cooperation, mutual interest of physicists in activities which are conducted in Geneva and Dubna.

Source: http://jinr.ru/news_article.asp?n_id=2491&language=eng

III. The rise of the Skolkovo Technopark

The Skolkovo Technopark is the facility that will host the 2016 International Association of Science Parks World Conference.

The technopark is the central element of the Skolkovo Innovation Center, the 400-hectare technology hub west of Moscow that is to be home to 30,000 residents by 2020.

The technopark will provide the dry and web labs for all research and development activities of Skolkovo's resident companies.

The few hundred startups currently at Skolkovo are located in the Technopark Office Center along with the foundation management. The first phase of the technopark is to come online in December, opening up 95,000 square meters of space to residents and partners.

Skolkovo won hosting rights to the International Association of Science Parks 2016 World Conference alongside Moscow State University Science Park, Technopark Strogino and the Innovation Development Center of Moscow.

Unofficially known as the tech park Olympics, the IASP World Conference is one of the leading global forums dedicated to sharing scientific and technological knowledge.

The IASP 2015 World Conference will be held at the Zhongguancun Science Park in Beijing, China.

Source: <http://sk.ru/news/b/articles/archive/2015/04/10/the-rise-of-the-skolkovo-technopark.aspx>

IV. The First Russian-German International Collaborative Research Centre Launched in 2015

St. Petersburg University, Ioffe Physical and Technical University and the German Universities of Dortmund, Bochum and Paderborn have established the first Russian-German International Collaborative Research Centre. The project is aimed at the study of the properties of spins, minute magnetic moments that elementary quasi-particles spreading in semiconductor crystals possess. Study of the interactions, dynamics and lifetime of spins is a most important fundamental objective of modern quantum physics.

Thanks to a 12-year funding period, new research trends can be developed within the framework of this project. The existing schools of thought can be supported, a comfortable environment can be created for the education and growth of the research staff.

The German party represented by the German Scientific Society (DFG) provides the annual funding making up more than 2 million Euro. The Russian party, on behalf of the Russian Foundation for Basic Research (RFBR), provides about 15 million rubles per year.

The center's research program encompasses 22 projects, each of them having both a German and a Russian head as well as requiring a doctoral or postdoctoral student's research work from each of these countries. Doctoral students are going to spend six months or even more in the partner laboratory while working on their theses for three years. The total of 150 Russian and German scientists will take part in this project.

Source: http://eng.spbu.ru/news/?read_news_id=2385

V. Conference on the Structure and the Interactions of the Photon including the 21th International Workshop on Photon-Photon Collisions and the International Workshop on High Energy Photon Colliders

The International Conference PHOTON 2015 will be held at Budker Institute of Nuclear Physics, Siberian Branch of RAS, Novosibirsk, Russia, from 15 to 19 June, 2015.

This conference is a part of the series initiated in 1973 in Paris, as an International Colloquium on Photon-Photon Collisions at Electron-Positron Storage Rings. The latest Photon conferences took place in Paris (2013), Spa(2011), Hamburg(2009), Paris (2007), Warsaw (2005) and in Frascati (2003).

At the conference, recent progress in understanding photon-photon and photon-proton processes will be presented. In addition, recent results on astrophysics and other related topics will be discussed.

Important Dates:

February 1, 2015 - Start of registration and abstract submission

May 10, 2015 - Deadline for registration and abstract submission

May 25, 2015 - Preliminary program, list of speakers

June 15, 2015 - Beginning of the Conference

June 19, 2015 - End of the Conference

October 1, 2015 - Deadline for contributions to the Conference Proceedings

Web-site of Conference: <http://photon15.inp.nsk.su/>

VI. IX International Forum "From Science to Business"

ITMO University is one of the organizers of the IX International Forum "From Science to Business" that will take place in St. Petersburg May 13 - 15, 2015.

Founded in 2007, the forum focuses on a science-based economy. More than 200 experts from higher educational institutions and academia, science, business and authorities take part in the event annually.

Agenda topics include:

- Strategic development of national innovation ecosystem;
- Technology transfer and regional economy;
- Systematic thinking and technology transfer: understanding of real market demands;
- Models of technology transfer; best practices of technology transfer centers;
- Technology transfer within the traditional university; an essential part of the future business education;
- Procedures and specific features of Intellectual property protection. Case of Pacific Rim;
- Marketing analysis and market research for the technology transfer;
- Presenting the innovative idea successfully;
- Social innovations and entrepreneurship;
- University as a member of the venture investment market in technology transfer;
- The role of engineering in technology transfer;
- Technology transfer within the territories of innovation development.

Official Web-site: <http://www.fs2b.ru/en/>



VII. MIPT Researchers Put Safety of Magic Anti-Cancer Bullet to Test

A group of MIPT researchers together with their colleagues from Moscow, Nizhny Novgorod, Australia and the Netherlands have carried out the first systematic study analyzing the safety of so-called upconversion nanoparticles that may be used to treat skin cancer and other skin diseases. This study is one of the most important steps on the path to new, safe and effective methods to diagnose and treat cancer. It was back in 1908 that the German naturalist and doctor Paul Ehrlich came up with the idea of a “magic bullet”— a drug that would fight only pathogenic microbes or cancer cells, without affecting the healthy cells. One century later chemists and physicians are closer than ever before to turning this idea into reality, thanks to nanotechnology.

“This study is an important step towards beginning to use UCNPs to diagnose and treat skin cancer and other skin diseases,” says Petersen. According to her, there are already studies of the use of nanoparticles for the treatment of skin diseases, but to utilize them on a large scale it is necessary to prove that they are safe and efficient.

The study was funded through a megagrant of the Russian government and a grant of the Russian Foundation for Basic Research

More: http://mipt.ru/en/news/magic_bullet_201504

VIII. Russian and German scientists will conduct joint research with using unique laser

A framework agreement on cooperation between ITMO University and the Technical University of Freiberg was signed in April 2015. During the meeting, issues of scientific cooperation in the framework of the European research center XFEL - X-ray laser on free electrons, which is going to start working in 2017 in Hamburg, were discussed.

Some 12 countries are involved in the international project on the laser setup construction, but core funding is carried out by Germany and Russia. In parallel, universities discussed the prospects of creation a joint Master Degree program in the materials science.

Source:

http://en.ifmo.ru/en/viewnews/4739/Russian_and_German_scientists_will_conduct_joint_research_with_using_unique_laser.htm

IX. BRICS countries universities will prepare professionals together

In April 2015, Russia for the second time entered the rights of the BRICS chairman, an informal association of five major emerging national economies: Brazil, Russia, India, China and South Africa. The BRICS summit in Ufa will become the central event of the Russian presidency. The event will be held on the 8-9 July, where the partner-countries representatives will discuss the economic partnership and the roadmap for investment cooperation. Work on the joint development of science and education has already begun: in March, the governments of the group countries signed a memorandum of cooperation in this area and decided to create the Universities League and the Network BRICS University.

According to the current concept, the cooperation will be based not on the state level but on the level of higher education institutions: they themselves will initiate the creation of international educational and research projects, conduct student exchange and seek assistance from foreign counterparts. A consortium of the BRICS countries universities will help to maintain a balanced joint personnel training in priority fields. However, the current collaboration with Chinese universities is not limited to academic students' exchange. In the Nanjing University and ITMO University the mirror laboratories are created, where the scientific staff conduct their research in collaboration; the joint research projects are run as well as educational programs for information technologies and optical design.

Source:

http://en.ifmo.ru/en/viewnews/4760/BRICS_countries_universities_will_prepare_professionals_together.htm



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