



СЕМИНАР ИФВЭ

Четверг, 17 августа 2017 г.

конференц-зал Отдела теоретической физики
начало в 16:00

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(Фермилаб)

Particles Colliders: Past, Present and Future

Абстракт

Developments of the particle colliders over last 50 years have seen tremendous progress in both the energy of the collisions and the intensity of the colliding beams. In order to reach even higher collision energy many fundamental inventions in the colliders design have been achieved. Progress to even higher energies was strongly stimulated by physics interests in studying smaller and smaller distances and in creation of heavier and heavier elementary particles. Experiments at colliders required major breakthroughs in the particle detection methods in order to discover new particles such as c and t quarks, gluons, tau lepton, W , Z and Higgs bosons which completed currently expected set of elementary particles. Options for even higher energy colliders will be discussed, including their design parameters, acceleration principles as well as construction challenges. Such colliders is the only way to understand the Nature at even smaller distances and create particles with even higher masses than we can reach today.