



## INTERNATIONAL COLLABORATIONS

### JAPAN: BELLE II IS IN PLACE INSIDE THE SUPERKEKB ACCELERATOR

The Belle II detector is in place at the SuperKEKB accelerator's point of collision, in the KEK laboratory in Japan. A crucial step towards the beginning of scientific activities of what will be the world's highest intensity accelerator was thus completed. Indeed, on the afternoon of April 11<sup>th</sup>, there was the successful completion of the "roll-in", i.e. the positioning of the entire Belle II detector system on the particle beam line, an operation that followed the completion of the assembly in the assembly area and the integration of the various components of the detector. Belle II, which is 8 meters high, and consists of seven sub-detectors, bearing with a total weight of roughly 1400 tonnes, was moved slowly and with extreme caution for about 13 meters, from the point of assembly to the beam collision point. It is now ready to collect the data of the future collisions produced by the accelerator, scheduled early next year.

The Belle II experiment is the result in an international collaboration, which involves more than 700 physicists and engineers from 23 countries, and to which Italy contributes significantly with INFN. The INFN Italian community engaged in Belle II consist of more than 70 scientists from nine INFN sections and laboratories and Universities. The Italian groups are involved in the construction of several key elements of the experiment: the vertex detector (SVD), which is necessary for the precision measurement of the point where the particles decay, the particle identification system (TOP), which allows the recognition of particles passing through the detector, the electromagnetic calorimeter (ECL), capable of measuring the energy of the particles, and the muon and K meson detector (KLM). In addition, Italy ensures a considerable contribution to the computing power necessary for the analysis of the enormous amount of data that the experiment will collect. ■