



## INFRASTRUCTURES

### PHASE 3 OF THE WORLD'S MOST POWERFUL B-FACTORY GETS UNDERWAY

On 22 March 2019, at the KEK Laboratory in Tsukuba, Japan, the Belle II experiment observed its first electron-positron collisions: Phase 3 of the project, in which INFN is also participating, thus got underway, following completion of the Belle II detector and an upgrade of the SuperKEKB accelerator, which is expected to reach a brightness 40 times greater than its predecessor KEKB. Belle II, on the other hand, has the ambitious goal of accumulating 50 times more data than its predecessor Belle, in order to find signals of new physics that could be hidden in the decays of B mesons, particles that contain a beauty (b) quark. The Belle II experiment, which is the result of the work of an international collaboration consisting of approximately 800 physicists from 23 different countries, is now ready, together with SuperKEKB, to become the most powerful "Super B-factory" in the world, able to produce in abundance and study B meson decays with great accuracy. ■