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SciTil Detector for the PANDA experiment at FAIR KEN SUZUKI, LUKAS GRUBER, STEFAN BRUNNER, JOHANN MARTON, Stefan Meyer Institute for Subatomic Physics, Austrian Academy of Sciences, HERBERT ORTH, Helmholtz Institute Mainz, CARSTEN SCHWARZ, GSI Helmholtzzentrum, SCITIL/PANDA COLLABORATION — The PANDA experiment at the Facility for Antiproton and Ion Research (FAIR) is a fixed-target experiment installed in a antiproton storage ring (HESR) in the energy range of 1 GeV to 15 GeV. FAIR is being build on the area of the GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt, Germany. The universal PANDA detector together with the HESR enables to study fundamental questions of hadron and nuclear physics, e.g. gluonic excitations, the physics of strange and charm quarks and nucleon structure. The SciTil detector is a barrel time-of-flight detector and is a relatively new subcomponent to the system. The demand arose in order to provide a securer event tagging at the event rates of 20-100 MHz instantaneous event rate, to improve a particle identification capability of relatively low momentum particles, and to allow a faster track finding with pattern recognition. The beam test of the SciTil prototype detector in January 2014 showed a promising result. We report the status and outlook of the project.

Ken Suzuki
Stefan Meyer Institute for Subatomic Physics,
Austrian Academy of Sciences

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