

Abstract Submitted  
for the APR18 Meeting of  
The American Physical Society

**Belle II iTOP detector: design, construction, and commissioning**

BOQUN WANG, Univ of Cincinnati — The imaging-Time-of-Propagation (iTOP) detector is a new type of ring-imaging Cherenkov counter developed for particle identification at the Belle II experiment. It consists of 16 modules arranged azimuthally around the beam line. The optical components of each module include one mirror, one prism and two quartz bar radiators. The readout system consists of an array of micro-channel-plate photo-multiplier tubes (MCP-PMTs), and waveform readout front-end electronics. The waveforms are processed by firmware, and the resulting pulse-heights and hit times are sent to the Belle II data acquisition system. The detector construction was completed and the detector was installed by the summer of 2016. Since February 2018, the iTOP detector, together with other sub-detectors in Belle II experiment, are in the Phase 2 commissioning. This talk describes the construction and commissioning of the Belle II iTOP detector.

Boqun Wang  
Univ of Cincinnati

Date submitted: 13 Feb 2018

Electronic form version 1.4