Contribution ID: **13** Type: **POSTER**

Bonding Study towards Quality Assurance of the Belle-II Silicon Vertex Detector Modules

Saturday, 26 September 2015 19:18 (1 minute)

The silicon vertex detector (SVD) for the Belle-II experiment comprises four layers of double-sided silicon strip detectors (DSSDs), assembled in a ladder-like structure. Each ladder module of the outermost SVD layer has four rectangular and one trapezoidal DSSDs supported by two carbon-fiber ribs. In order to achieve a good signal-to-noise ratio and minimize material budget, a novel chip-on-sensor "Origami" method has been employed for the three rectangular sensors sandwiched between the backward rectangular and forward (slanted) trapezoidal sensors. The poster describes the bonding procedures developed for making electrical connections between sensors and signal fan-out flex circuits (aka, pitch adapters), and pitch adapters and readout chips as well as the results in terms of the achieved bonding throughput and pull force.

Primary authors: PARK, Hwanbae (Kyungpook National University); JEON, Hyebin (Kyungpook National University); Mr KANG, Kookhyun (on behalf of the Belle-II SVD Collaboration)

Presenter: Mr KANG, Kookhyun (on behalf of the Belle-II SVD Collaboration)

Session Classification: After dinner POSTER session, with drinks: (All presenters are requested/encouraged to attend their posters; All participants are requested to participate the session, with drinks!)

Track Classification: Strips